

20
24

Live AM: ARTIST MONITOR

Edition

Film-Media Music and AI: An analysis of attitudes and behaviors of film and media music professionals towards artificial intelligence.

A partnership with **SOUNDTRACK_COLOGNE.**



FRANCISCO TIGRE MOURA
MICHAEL P. AUST

COLLABORATORS

iu
INTERNATIONAL
UNIVERSITY OF
APPLIED SCIENCES

**SOUND
TRACK
COLOGNE
2024**
21

ecsa european
composer & songwriter
alliance

CC
Composers Club e.V.

DEFKOM
DEUTSCHE FILMKOMPONIST:INNENUNION

**Live
INNOVATION**
.ORG

LANDESMUSIKRAT.NRW

forumfilm**musik**
111

mediamusic e.V.
berufsverband medienmusik

LIVE AM: ARTIST MONITOR is an applied research project, with a mission of investigating perceptions and behaviors of music professionals towards timely issues. Moreover, to share research findings in an accessible format, and contribute to discussions on relevant issues in the entertainment sector.

LIVEINNOVATION.ORG is an independent academic initiative founded by Francisco Tigre Moura in 2017. It is a platform to support and inspire students through educational content, and a way to connect with scholars and industry stakeholders. The main areas of interest involve general marketing and consumer behaviour, artificial creativity and technology innovation and experiences. All studies and content is mostly related to contexts of entertainment experiences.

DISCLAIMER REGARDING IMAGES

All images in this report were derived from Canva, and are free for non-commercial use for all Canva Pro subscribers.

TEAM



PROF. DR. FRANCISCO TIGRE MOURA

IU UNIVERSITY OF APPLIED SCIENCES (GERMANY)

Ph.D in Marketing (University of Otago, New Zealand). Professor of Marketing at IU University of Applied Sciences (Germany), researcher, consultant and speaker.

Founder of liveinnovation.org and passionate about everything that involves Music, Marketing, Technology and the Future.

francisco.tigre-moura@iu.org



MICHAEL P. AUST

SOUNDTRACK_COLOGNE

Dipl.-Kfm. (University Cologne, Germany). Curator, organiser of cultural events, film producer, film director and CEO at TelevisorTroika GmbH.

Founder of SoundTrack_Cologne and SoundTrack_Zurich. Producer credits for 20 films, directorial debut Can and Me 2023. Passionate about the relationship of music and moving pictures

michael@televisor.de

COLLABORATORS

The 2024 edition was supported by Valentina Obando, and multiple partners who contributed to data collection by sharing the survey through their mailing lists. We would like to express our gratitude to them. All partners are listed below:



TABLE OF CONTENTS

01

WELCOME

02

EXECUTIVE SUMMARY

03

METHODOLOGY

04

PROFILE OF RESPONDENTS

07

PERCEPTION TOWARDS AI

13

COPYRIGHTS AND LEGISLATION

19

CO-CREATION WITH AI

24

EMPLOYABILITY

29

FINAL CONSIDERATIONS

30

CONTACT AND REFERENCE

31

MORE PUBLICATIONS AT
[LIVEINNOVATION.ORG](https://liveinnovation.org)

20
24

Live AM: ARTIST MONITOR

Edition



WELCOME!

Dear Reader,

So far, 2024 has been characterized as a year where innovations in AI have truly taken off, with new tools being launched on a weekly basis. These innovations are enabling previously unthinkable possibilities and making it extremely difficult to keep up. Without a doubt, advancements in automation and artificial creativity are rapidly reshaping several sectors, including the music industry.

However, such drastic changes and fast-moving scenarios also bring great challenges that deeply concern professionals in the field. Therefore, more than ever before, it is crucial to understand the magnitude and direction of these attitudes. Thus, the 2024 edition of the **Live AM: Artist Monitor** addressed four important issues:

- Perceptions towards AI
- Copyrights and legislation
- Co-Creation with AI tools
- Employability

Importantly, while cross-sectional studies (measuring perceptions at a single point in time) are valuable for understanding current attitudes, only multiple evaluations (longitudinal studies) can provide a clear view of changes in attitudes and behaviors over time. Therefore, we hope this study will be replicated in 2025 with an even larger sample, and that we can count on your support to achieve this goal.

But, for now, we hope you will find the **2024 Live AM: Artist Monitor** report easy to follow, insightful and relevant.

Cheers,

Francisco Tigre Moura & Michael P. Aust

EXECUTIVE SUMMARY

2024 Edition



The 2024 edition of the Live AM: Artist Monitor revealed important findings regarding the perceptions of music professionals towards artificial intelligence (AI). A few insights are mentioned next:

Perceptions towards AI

A significant portion of participants identify rate themselves as beginners or advanced beginners in AI. They are very concerned about the devaluation of music as an art form, the potential for being replaced by AI tools, and the implications of the AI revolution on the distribution of revenue in the music industry. Additionally, there is a great worry that their work might be used without their consent to train algorithms and for other similar purposes.

Copyrights and legislation

Despite the high level of concern among music professionals about the impact of AI, there is an alarmingly low awareness of the actions taken by political parties and organizations to protect the rights of composers. Additionally, the results indicate a very low level of awareness regarding the AI Act.

Co-creation with AI

Overall, the results indicated a low level of adoption of AI tools among participants and a similarly low propensity to use them in the near future. Additionally, there is a strong belief that the use of such tools reduces the meaning of the creative output they generate. Furthermore, most respondents reported that using AI tools neither enhanced their creativity nor their productivity.

Employability

The results indicate that participants recognize the necessity of adapting to the AI revolution and developing new AI-related skills. However, there is significant concern about job loss and a loss relevance of their profession due to AI. Additionally, the AI revolution appears to negatively impact their motivation towards their work. Finally, respondents do not believe that AI will generate new and interesting work opportunities within the music sector.

METHODOLOGY

2024 Edition

The data here presented was collected online during the months of February and June 2024. The measurements were defined through discussions with scholars and industry stakeholders. The population of the study was defined as music professionals and academics, over the age of 18 years old. No restriction of market was made.

For the data collection, non-probability sampling techniques were applied. In specific, convenience and snowball sampling. The survey was distributed directly and indirectly through the mailings lists of collaborators of this project: SOUNDTRACK_COLOGNE, ECSA (European Composer and Songwriter Alliance), Composers Club e.V., DEFKOM - Deutsche Filmkomponistenunion, Landesmusikrat (NRW), Forumfilmmusik and Mediamusick e.V.

A total of 222 respondents answered the survey. After data screening, a final valid sample of 163 respondents over 18 years old was used for the analysis. All analysis were conducted on SPSS V25 and tests included descriptive statistics, cross-tabulation, Chi-Square, One-way ANOVA, correlation and independent Samples t-Test.

LIMITATIONS & NOTES FOR INTERPRETATION

First, attitude and intentions represent only an indication of future behavior. Often, such indications are not reflected in actual behavior. Also, the application of non-probability sampling techniques may represent a limitation of the study. Finally, findings are not representative of the study population, and thus, results cannot be generalized.



20
24

Live AM: ARTIST MONITOR

Edition

PROFILE OF RESPONDENTS

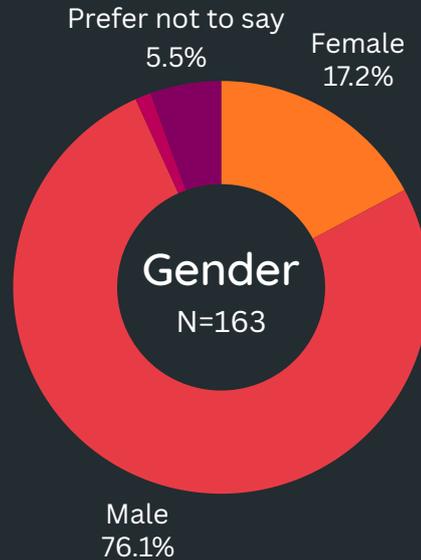


SAMPLE

2024 Edition

163
total valid respondents

* Sample size will be reported per question, as it may vary.



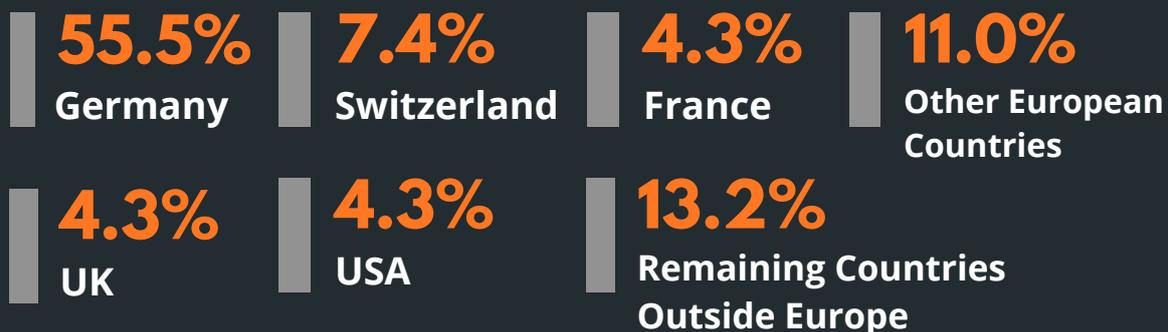
N=163



* Respondents under 18 years were not included in the study.



N=162



How long have you been working in the music industry? (N=222)



SAMPLE

2024 Edition

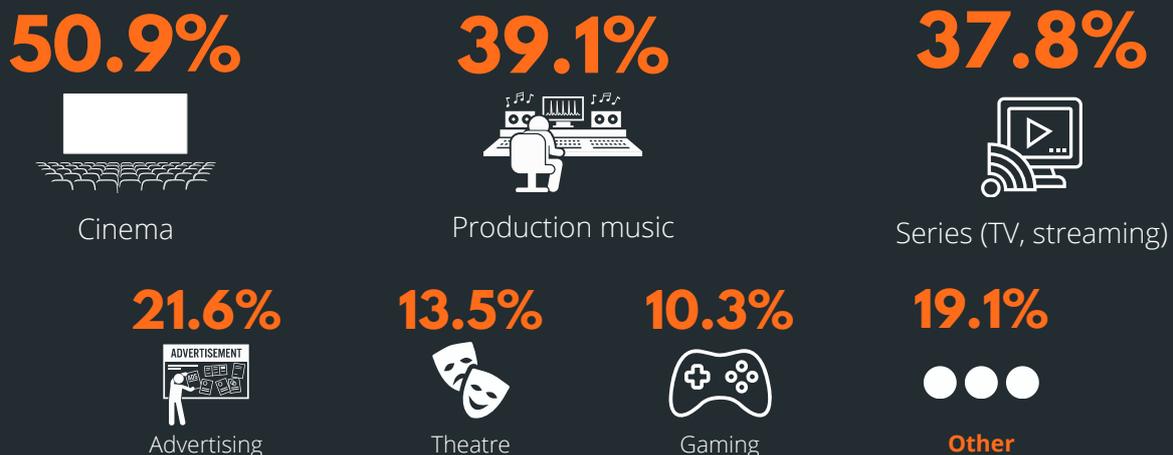
Which role best describes your main task in the music industry?

Respondents could choose more than 1 answer (N=222)



For which sectors do you mostly work?

Respondents could choose more than 1 answer (N=222)



20
24

Live AM: ARTIST MONITOR

Edition

PERCEPTIONS TOWARDS AI





PERCEPTIONS TOWARDS AI

RATIONALE OF QUESTIONS

The first section of the report investigated three main aspects regarding perceptions towards AI. They are described as follows:

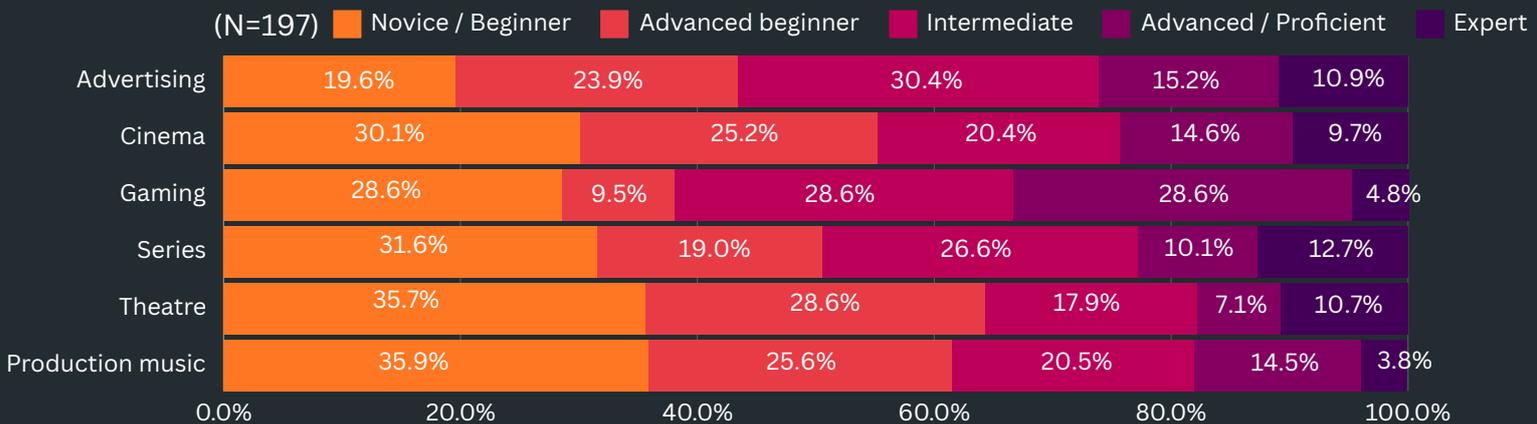
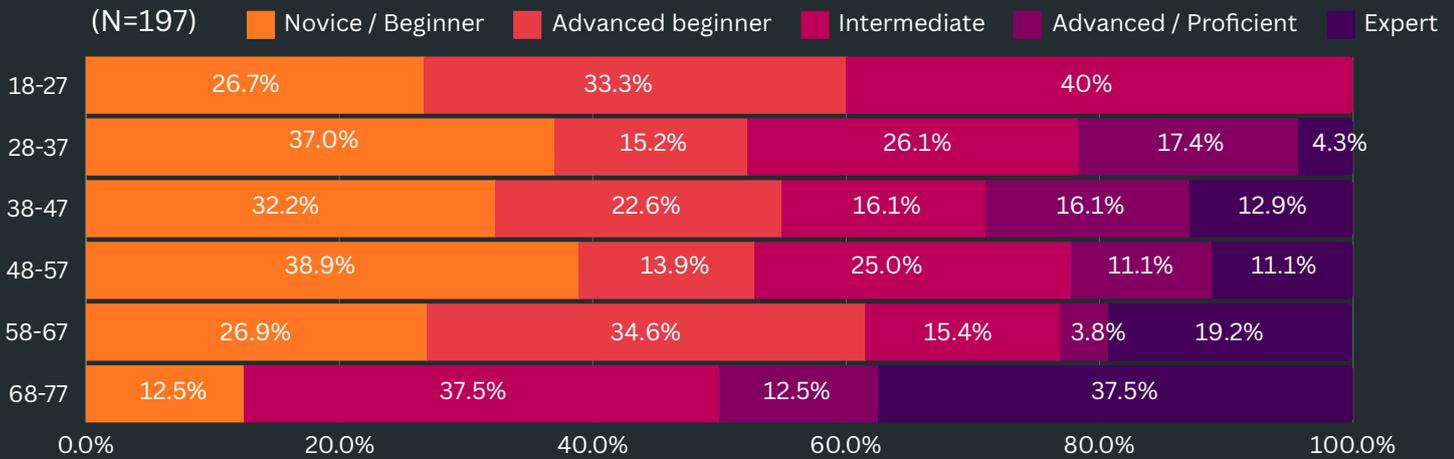
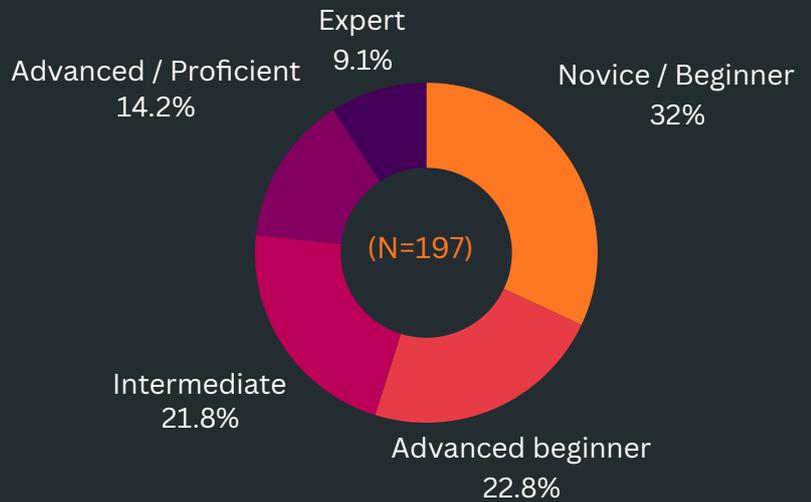
- **Knowledge and skill.** Measuring the knowledge and skills of participants regarding AI is crucial as it offers a comprehensive overview of the current level of familiarity and understanding among music professionals concerning their technical proficiency with AI tools. This understanding is essential for accurately interpreting the attitudes and behaviors reported later, as it provides context for how well these professionals can engage with and utilize AI technologies in their work.
- **General attitude.** These questions aim to measure both cognitive and affective evaluations, such as excitement, creativity, and the emotional responses that AI-generated music may evoke. By doing so, they offer an initial overview of the general sentiment among professionals towards AI in the music industry.
- **Concerns towards the impact of AI in music.** The excitement surrounding AI and its capabilities is often accompanied, rightly so, by significant concerns about its potential impact and the serious ethical issues related to its implementation. This section addresses some of these critical concerns.

RESULTS

2024 Edition

PERCEPTIONS TOWARDS AI

How do you rate your knowledge and skill levels on AI and the use of its tools?



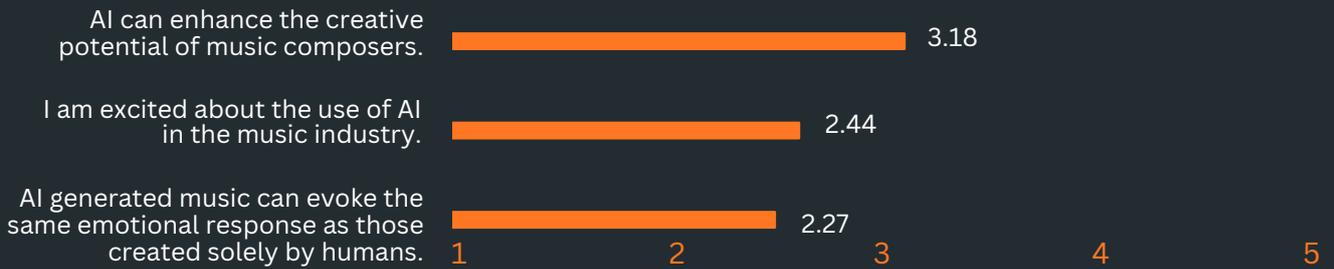
RESULTS

2024 Edition

PERCEPTIONS TOWARDS AI

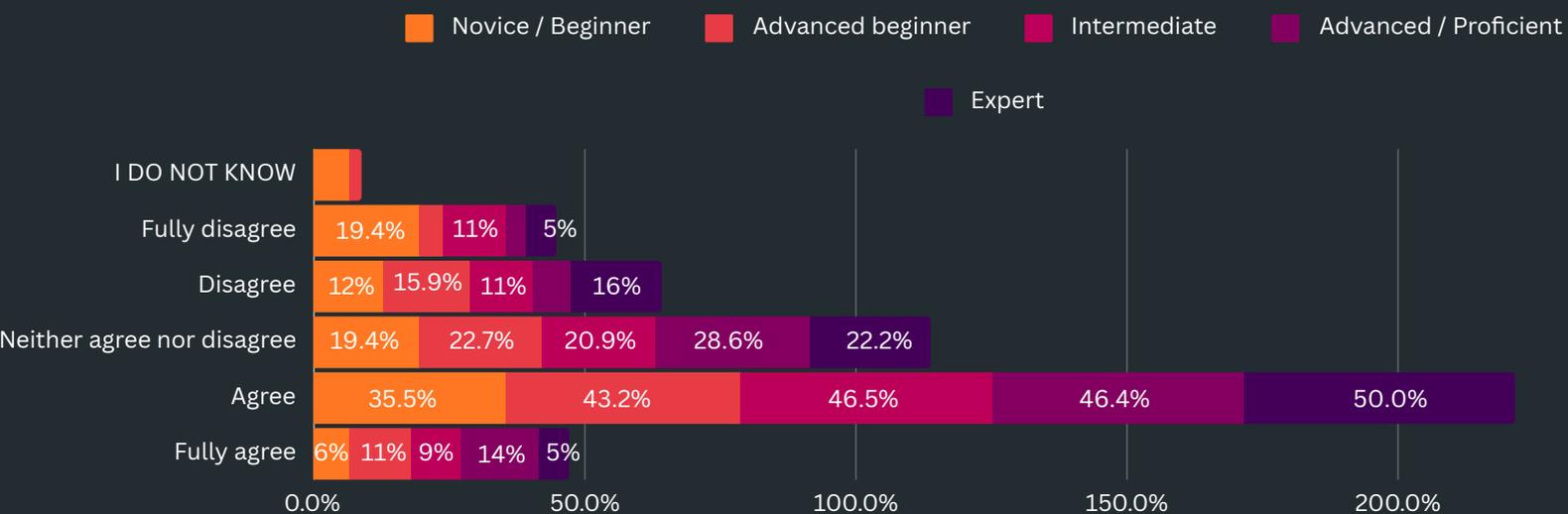
General attitude: To which extent do you agree with the following statements?

Items measured in a 1 (Fully disagree) - 5 (Fully agree) Likert type scale. (N=195)



General attitude: To which extent do you agree with the following statement?

“AI can enhance the creative potential of music composers”.



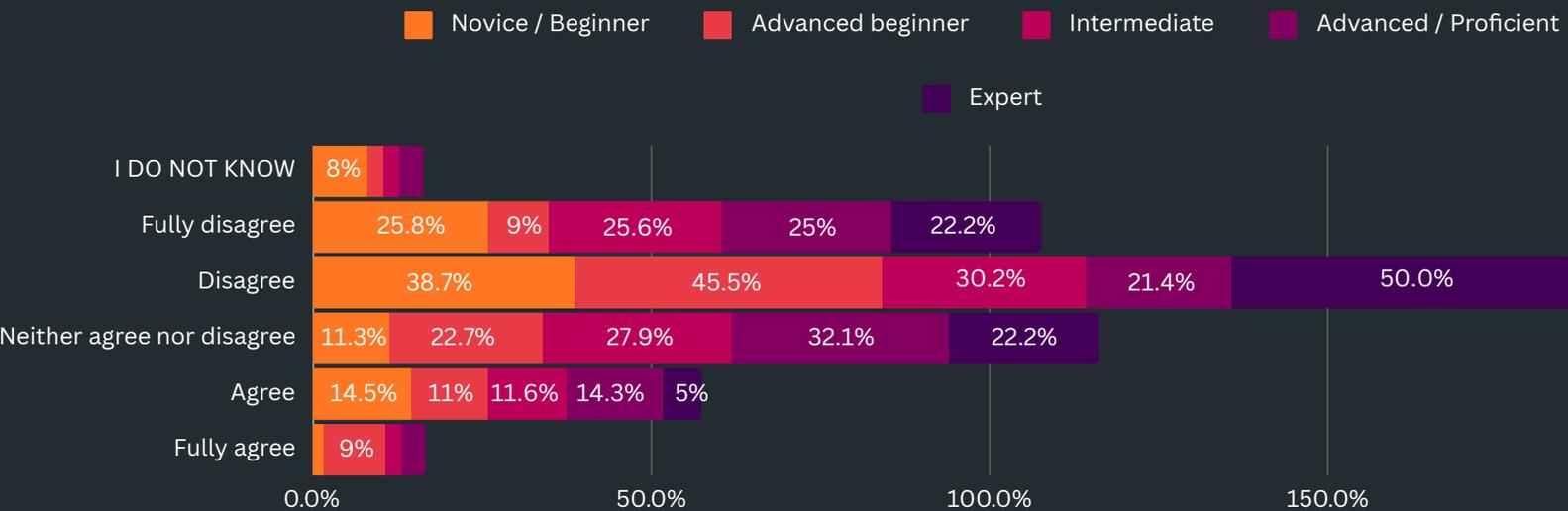
RESULTS

2024 Edition

PERCEPTIONS TOWARDS AI

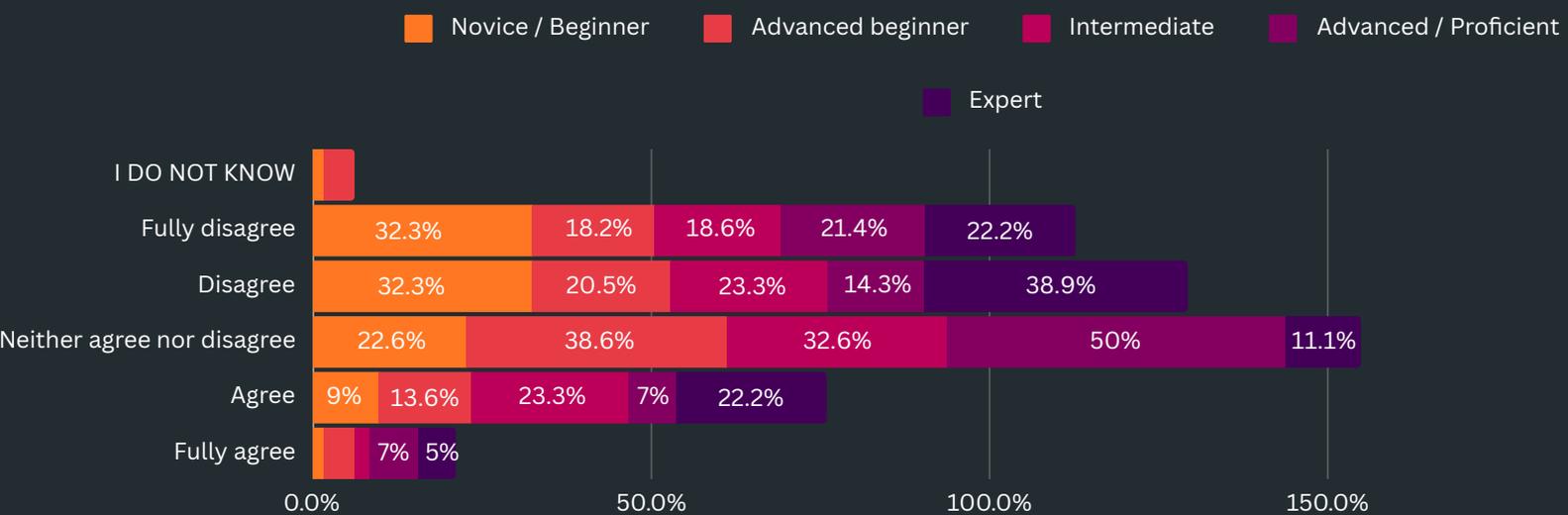
General attitude: To which extent do you agree with the following statement?

“AI generated music can evoke the same emotional response as those created solely by humans.”



General attitude: To which extent do you agree with the following statement?

“I am excited about the use of AI in the music industry”.



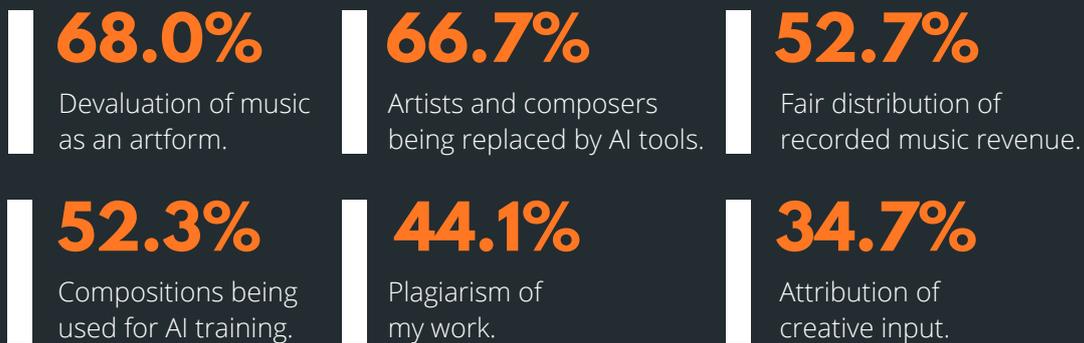
RESULTS

2024 Edition

PERCEPTIONS TOWARDS AI

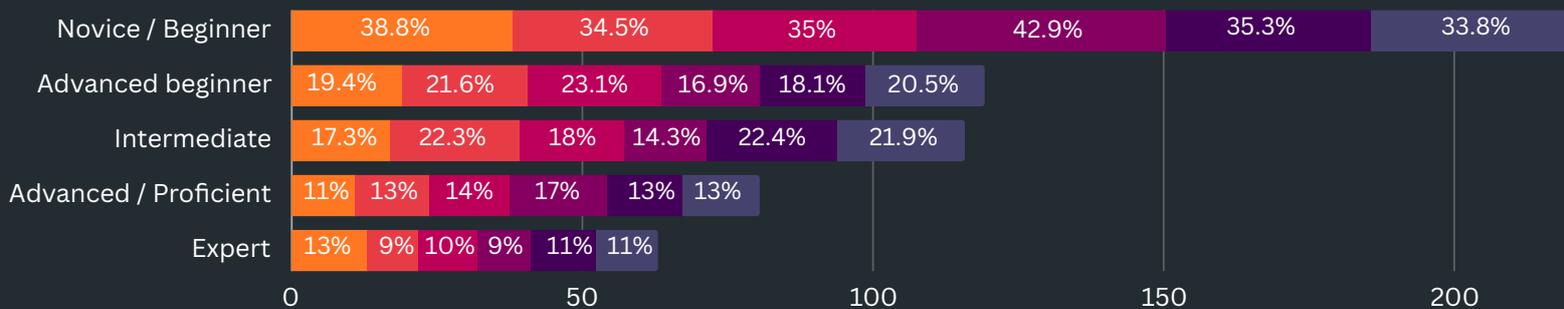
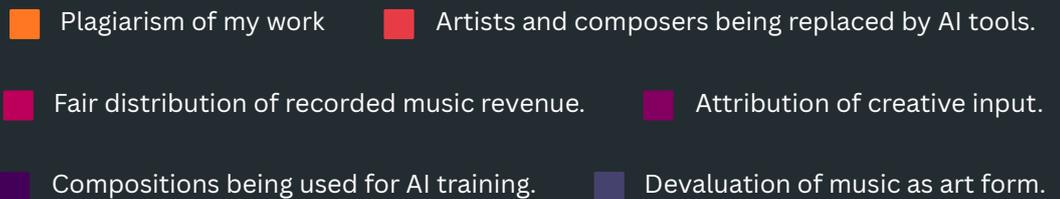
Which of the following represent your main concerns towards the impact of AI in music?

Respondents could choose more than 1 answer (N=197)



Concerns towards the impact of AI in music and knowledge and skill level of AI

(N=197)



20
24

Live AM: ARTIST MONITOR

Edition

COPYRIGHTS AND LEGISLATION





COPYRIGHTS AND LEGISLATION

RATIONALE OF QUESTIONS

The second section of the report investigated three main aspects regarding copyrights and legislation. They are described as follows:

- **Lobbying.** The drastic changes brought about by AI pose significant challenges to existing legislation and copyright laws. Therefore, it is crucial to measure the perceptions of music professionals regarding the efforts of various political parties and music organizations in Germany to protect their rights. Understanding these perspectives will inform policymakers and stakeholders about the effectiveness and acceptance of current and proposed measures, ensuring that the interests of music professionals are adequately protected.
- **AI Act.** In short, the AI Act was developed to ensure that AI is used safely within the EU while respecting the rights of authors. It is crucial to measure the extent to which music professionals believe the AI Act effectively protects these rights.
- **General attitude towards protection.** One of the greatest challenges of AI in music is the lack of control authors have over how their work may be used and modified by others, such as for training generative AI tools. This section examines the attitudes of professionals, their primary concerns, and the conditions under which they would permit their work to be utilized by others.

RESULTS

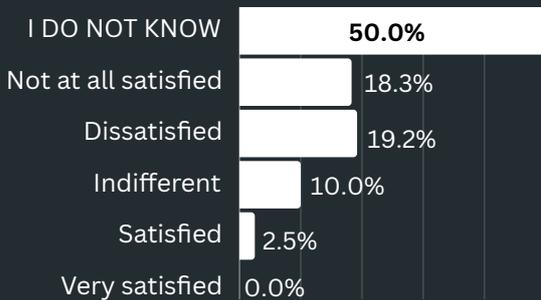
2024 Edition

COPYRIGHTS AND LEGISLATION

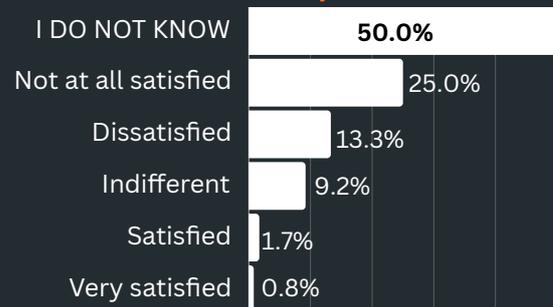
LOBBYING: How satisfied are you with how the following political parties are defending the interests of composers in relation to the impact of AI in music?

(N=120)

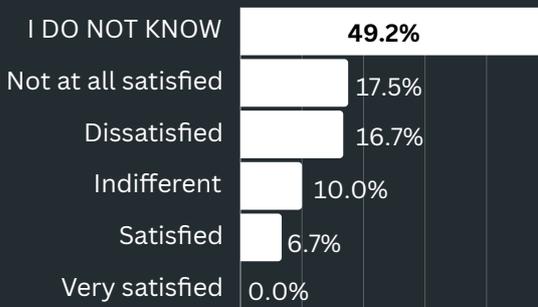
SPD



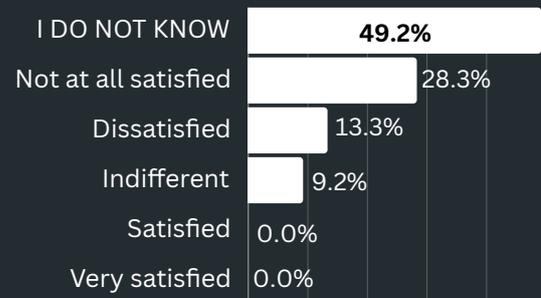
CDU/CSU



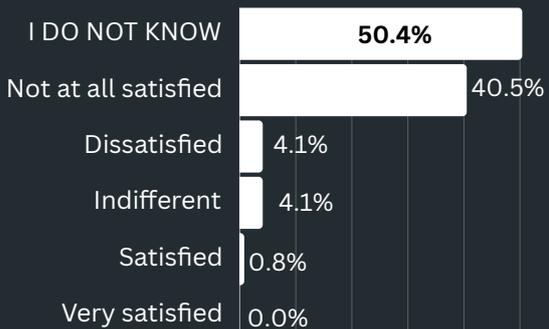
Grüne



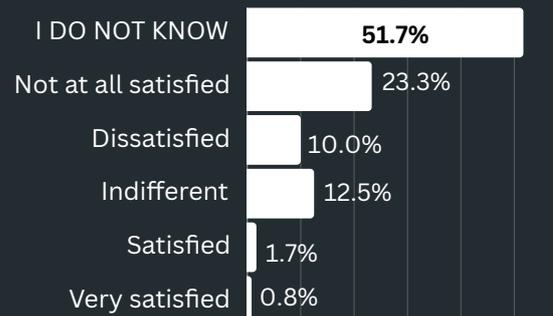
FDP



AfD



Die Linke



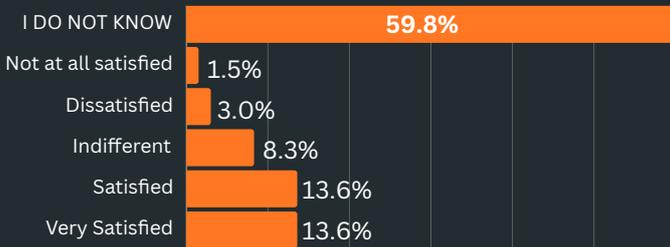
RESULTS

2024 Edition

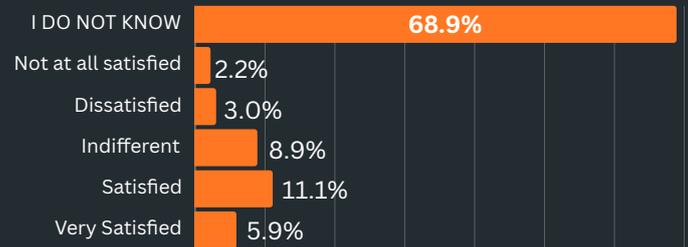
COPYRIGHTS AND LEGISLATION

LOBBYING: How satisfied are you with how active the music associations and institutions are in defending the interests of composers in relation to the impact of AI in music? (N=132)

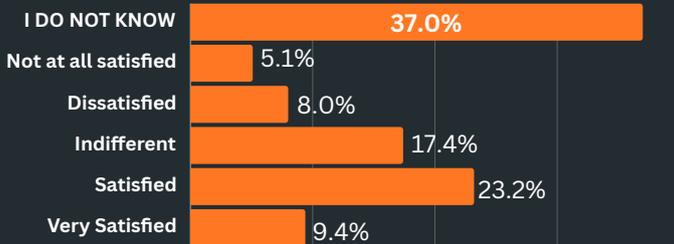
Initiative Urheberrecht



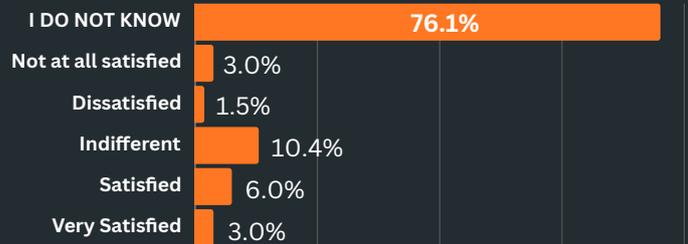
ECSA



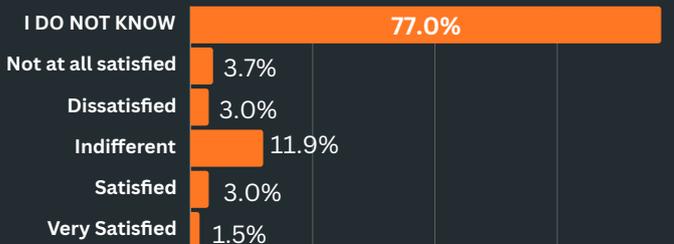
GEMA



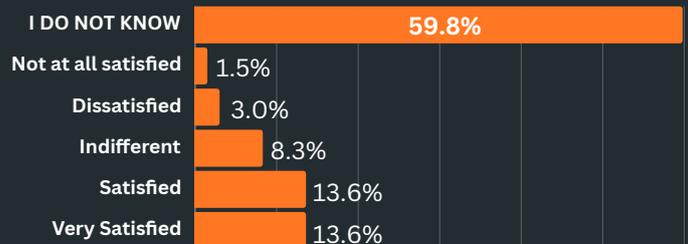
SACEM



SUISA



Composers Club



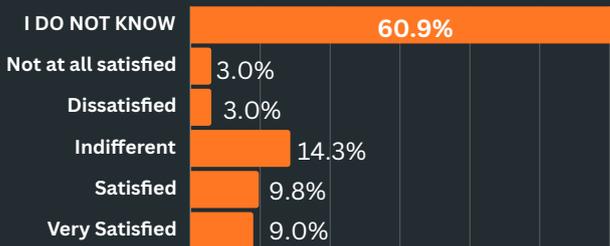
RESULTS

2024 Edition

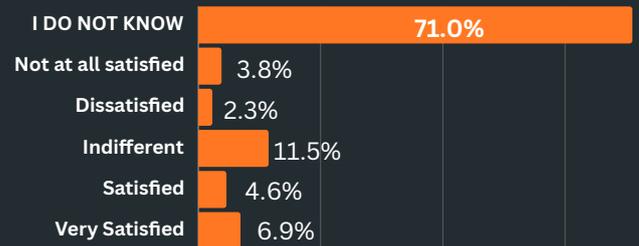
COPYRIGHTS AND LEGISLATION

LOBBYING: How satisfied are you with how active the music associations and institutions are in defending the interests of composers in relation to the impact of AI in music? (N=132)

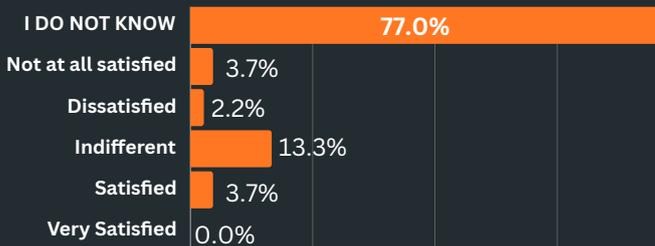
DKV / DEFKOM



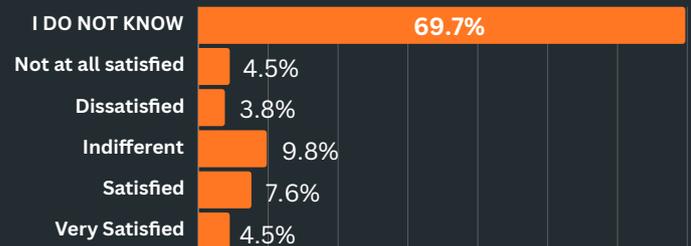
MediaMusic



SONART

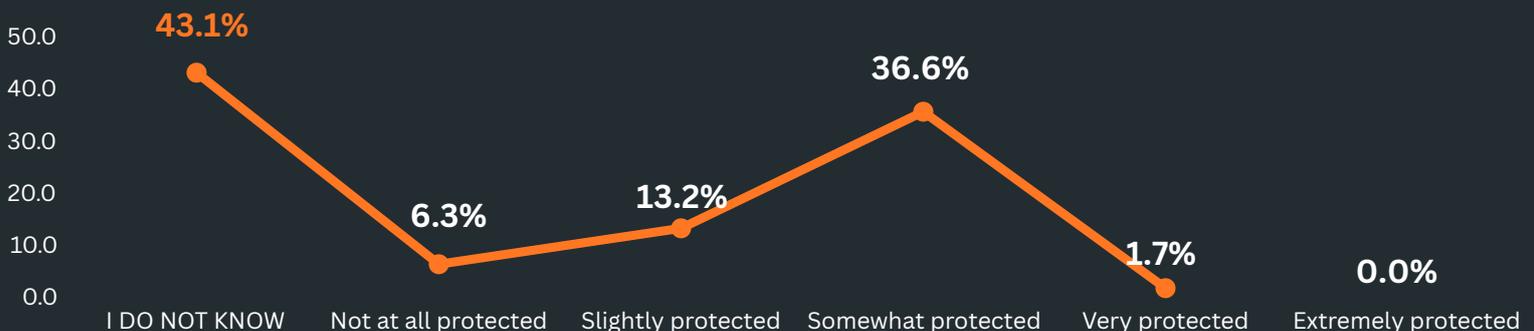


Deutscher Musikrat



AI ACT: To which extent do you believe the AI ACT helps to protect authors' rights?

(N=174)



RESULTS

2024 Edition

COPYRIGHTS AND LEGISLATION

PROTECTION: Under which conditions would you allow your work to be used by others using AI?

Respondents could choose more than 1 answer (N=174)



General attitude: To which extent do you agree with the following statements?

Items measured in a 1 (Fully disagree) - 5 (Fully agree) Likert type scale. (N=168)



90.0%

Agree or fully agree that **they are concerned about the ownership and copyright issues in the AI era.**

18.1%

Agree or fully agree that **their work can be used without consent for AI training purposes.**

19.0%

Agree or fully agree that **imagine using AI tools to modify or use the work of others.**

20
24

Live AM: ARTIST MONITOR

Edition

CO-CREATION WITH AI TOOLS





CO-CREATION WITH AI

RATIONALE OF QUESTIONS

The third section of the report investigated three main aspects regarding co-creation with AI. They are described as follows:

- **Generative AI use.** Generative AI allows for various types of applications and modes of use within the music related tasks. This section measures the various forms it can be used, and the frequency of usage. By doing so, it provides an overview of the current adoption behaviors by music professionals..
- **Personal experience.** Most music professionals have already engaged in some form of co-creation with AI tools. This section allows for a self-reflection of their experiences, evaluating how these artificial co-creations have impacted their creativity and productivity. Additionally, it examines the relationship between using AI for composing music for pleasure and the perceived meaningfulness of compositions created with AI among those who have utilized these tools.
- **Future use.** Finally, the section ends with a question regarding future behavioral intention. It serves also to provide an indication of the general attitude of music professional towards current AI tools.

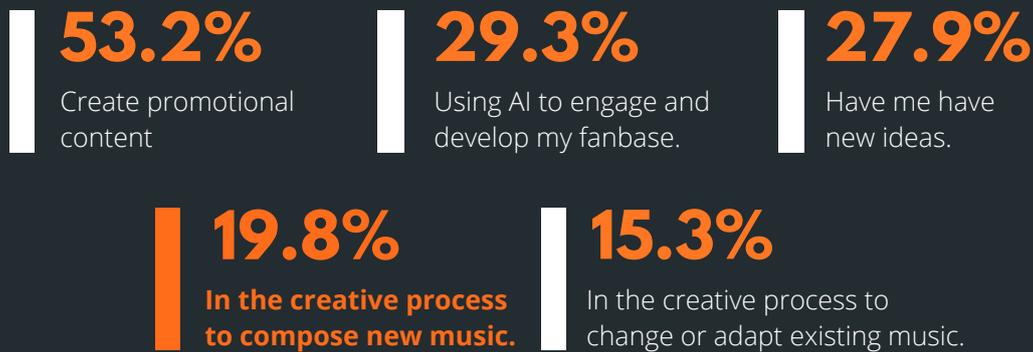
RESULTS

2024 Edition

CO-CREATION WITH AI TOOLS

GENERATIVE AI TOOLS: For which type of activities are you most likely to use AI tools?

Respondents could choose more than 1 answer (N=165)



GENERATIVE AI TOOLS: How often have you used AI tools in the last 3 months for the following purposes?

Items measured in a 1 (Never) - 5 (A great deal) Likert type scale. (N=160)



RESULTS

2024 Edition

CO-CREATION WITH AI TOOLS

GENERATIVE AI TOOLS: How often have you used AI tools in the last 3 months for the following purposes?

Items measured in a 1 (Never) - 5 (A great deal) Likert type scale. (N=160)

	Never	Rarely	Somewhat often	Very often	A great deal
Music composition	75.5%	20.1%	3.8%	0.6%	0.0%
Orchestration or arrangement: instrumentation	93.8%	5.6%	0.6%	0.0%	0.0%
Orchestration or arrangement: harmonization	92.5%	7.5%	0.0%	0.0%	0.0%
Adapt existing music (e.g., length, complexity or key signature)	88.1%	9.4%	2.5%	0.0%	0.0%
Inserting stylistic copies or quotations	88.2%	9.9%	1.9%	0.0%	0.0%
Transforming music data into notation, writing out abbreviations.	80.1%	13.7%	4.3%	1.2%	0.6%
Music production (e.g. Mixing, mastering)	49.4%	20.6%	17.5%	8.8%	3.8%
Song lyrics writing	76.3%	14.4%	6.9%	2.5%	0.0%
Audiovisual synchronization	83.8%	10.0%	5.0%	1.3%	0.0%

RESULTS

2024 Edition

CO-CREATION WITH AI TOOLS

PERSONAL EXPERIENCE: How much do you agree with the following statements?

Items measured in a 1 (Fully disagree) - 5 (Fully agree) Likert type scale. (N=161)

Creativity: AI tools enhance my creativity.  2.29

Productivity: AI tools enhance my productivity.  2.83

I would not use AI tools if composing music for my own pleasure.  3.12

If I use AI tools, the compositions I create become less meaningful to me.  3.20

18.0%

Agree or fully agree that AI tools enhance their creativity.

38.5%

Agree or fully agree that AI tools enhance their productivity.

44.7%

Agree or fully agree that they would not use AI tools if composing music for their own pleasure.

35.4%

Agree or fully agree that If using AI tools, the compositions become less meaningful to them.

FUTURE USE: How likely is that you will continue to use (or start using) generative AI tools for your work in the next 3 months? (N=165)

24.8% Very unlikely

20.6% Unlikely

28.5% Neither likely nor unlikely

21.2% Likely

4.8% Very likely

20
24

Live AM: ARTIST MONITOR

Edition



EMPLOYABILITY





EMPLOYABILITY

RATIONALE OF QUESTIONS

The fourth and final section of the report investigated three main aspects regarding employability. They are described as follows:

- **General attitude.** One of the primary negative impacts of AI for professionals, in general, is its effect on the job market. AI systems can deliver high-quality outputs at a speed and scale that humans cannot match. Consequently, this section measures fears of job loss, the perceived relevance of jobs in the face of AI, and perceptions of the job opportunities that AI may create..
- **Job motivation.** Automation fundamentally changes how tasks are performed. In the context of music, tasks such as composing are often associated with a sense of pleasure. Since AI alters the human role in creative processes, it is expected to influence motivation as well. Furthermore, the potential for job loss due to AI's impact is likely to affect overall motivation in the industry.
- **Future career.** The final question of this section assesses the likelihood that professionals would recommend a young person to start a career in the music industry, considering the current AI revolution. This question also serves as an indicator of the general attitude towards the current state of the music sector.

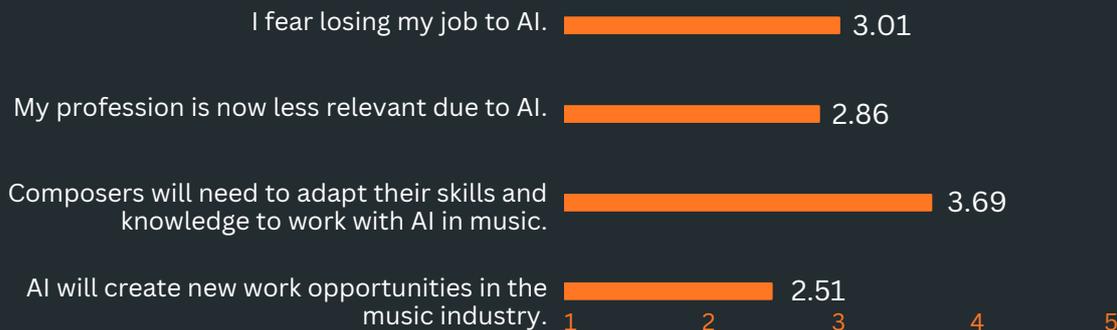
RESULTS

2024 Edition

EMPLOYABILITY

EMPLOYABILITY: to which extent do you agree with the following statements?

Items measured in a 1 (Fully disagree) - 5 (Fully agree) Likert type scale. (N=158)



66.6%

Agree or fully agree that composers will need to adapt their skills and knowledge to work with AI in music.

44.3%

Agree or fully agree that they fear losing their job to AI.

40.5%

Agree or fully agree that their profession is now less relevant due to AI.

20.8%

Agree or fully agree that AI will create new work opportunities in the music industry.

RESULTS

2024 Edition

EMPLOYABILITY

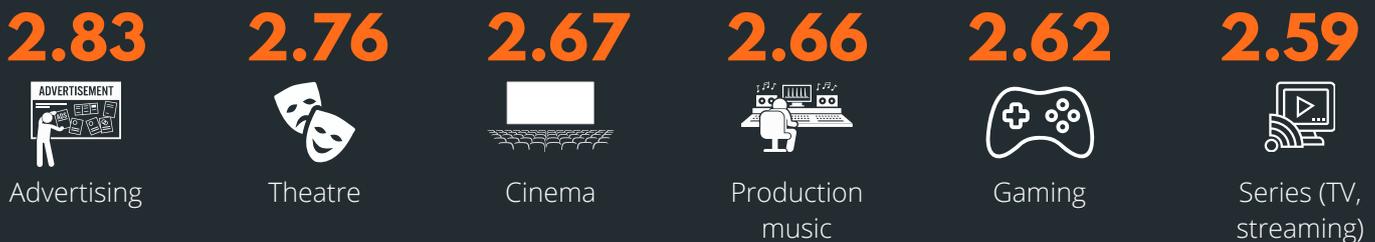
JOB MOTIVATION: How does the AI revolution impact your motivation to work in the music sector?

Items measured in a 1 (Strongly demotivates me) - 5 (Strongly motivates me) Likert type scale. (N=165)



Overall average per sector.

Items measured in a 1 (Strongly demotivates me) - 5 (Strongly motivates me) Likert type scale. (N=165)



RESULTS

2024 Edition

EMPLOYABILITY

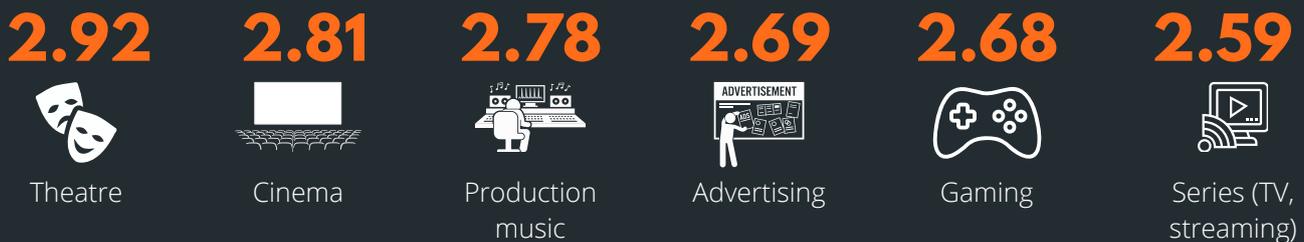
FUTURE CAREER: Reflecting on the current and future impact of AI in music, how much would you recommend a young person to start a career in your field in the music sector? (N=165)

Items measured in a 1 (Definitely would not recommend) - 5 (Definitely would recommend) Likert type scale.



Overall average per sector.

Items measured in a 1 (Definitely would not recommend) - 5 (Definitely would recommend) Likert type scale.





FINAL CONSIDERATIONS

- **Attitude in times of drastic innovation and change.** In short, the results indicated a rather negative attitude towards and low adoption of AI systems by music professionals. However, these findings are to be expected, as similar patterns have emerged throughout history when technological innovations have challenged deeply rooted paradigms and established processes. Nonetheless, we must also recognize that the impact of the AI revolution is, in many ways, unprecedented. Its processing capacity, scale, and quality of output alter the role of humans in creative processes and challenge our understanding of creativity and what it means to be a creative professional.
- **The need to develop a longitudinal evaluation.** Given the rapid development of AI and the global adoption of smart tools, attitudes and behaviors in the music sector are expected to change very quickly. Consequently, a single measurement (as presented in this report) is insufficient to fully understand how AI is perceived and adopted within the industry. Therefore, it is crucial to develop a longitudinal evaluation of these attitudes and behaviors to obtain a holistic perspective on the impact of AI on music professionals.
- **Research limitations.** Finally, as always, research results must be interpreted in light of their limitations. For example, the study's sample size and the use of convenience sampling represent limitations that impact the external validity of findings. Consequently, the results cannot be generalized to the entire population of music professionals.

WOULD YOU LIKE TO COLLABORATE ON THE 2025 EDITION OF THE ARTIST MONITOR?

CONTACT

For a copy of this report or more information regarding the project visit the Live AM: Artist Monitor page at [LiveInnovation.org/artist-monitor](https://liveinnovation.org/artist-monitor)

Or contact:

- Prof. Dr. Francisco Tigre Moura: francisco.tigre-moura@iu.org
- Michael P. Aust: michael@televisor.de

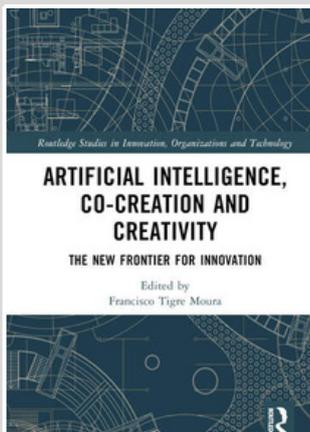
REFERENCE

Tigre Moura, F.; Aust. M, P. (2024). Film-Media Music and AI: An analysis of attitudes and behaviors of film and media music professionals towards artificial intelligence. Retrieved from Live AM: Artist Monitor project, Germany: <https://liveinnovation.org/artist-monitor>

MORE PUBLICATIONS

DOWNLOAD AT: LIVEINNOVATION.ORG

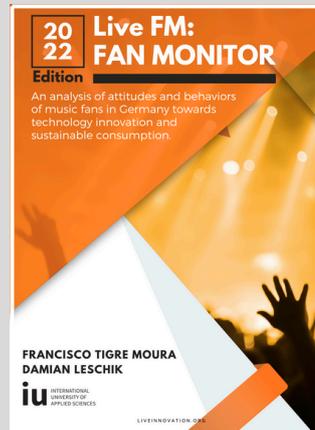
UPCOMING BOOK



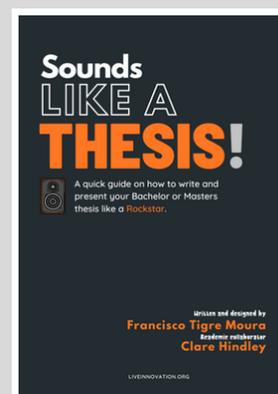
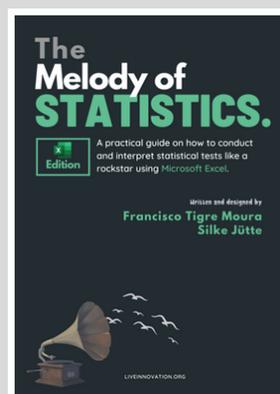
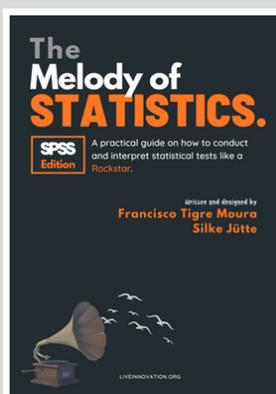
Coming out August 2024

- Title: Artificial Intelligence, Co-creation and Creativity - The New Frontier For Innovation
- Publisher: Routledge
- Editor: Francisco Tigre Moura

LIVE FM: FAN MONITOR (2023-2020 REPORTS)



EDUCATIONAL E-BOOKS





**IS YOUR
CURIOSITY
ALIVE?**

LIVEINNOVATION.ORG

Research to collaborate.
Educate to inspire.

LIVEINNOVATION.ORG