



# Artificial Intelligence and Music Composition:

The Perception of Listeners in Germany



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# Preface

## Introduction



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Automation has reached creative industries, including music. Algorithms are now capable of understanding musical patterns, and composing original songs. However, music has always been an important tool for human expression of ideas and feelings, contemplation and wonder. Thus, how will listeners feel when this beautiful human process is automated?

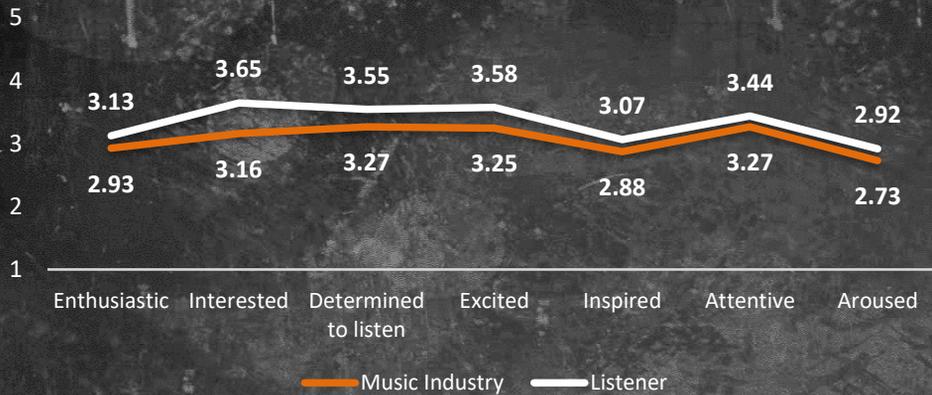
In this report I address one timely question: *How do listeners in Germany perceive the idea of artificial intelligence composing music?*

## Methodology

The following results are an extract from an investigation which started in 2017. The data has been collected through three different structured online surveys, shared through digital platforms, at LiveInnovation.org and direct mailing in Germany. Students at IUBH University of Applied Sciences supported the data collection. The population of the study is defined as German residents and involved with music. The combined sample size consists of 1.058 valid respondents.

# 3. Attitude towards AI Composing Music

Affective response: How do you feel about the idea of AI composing music?  
(Music professionals and listeners)



Scale ranging from 1 (Does not apply at all, to 5 (Applies very much)

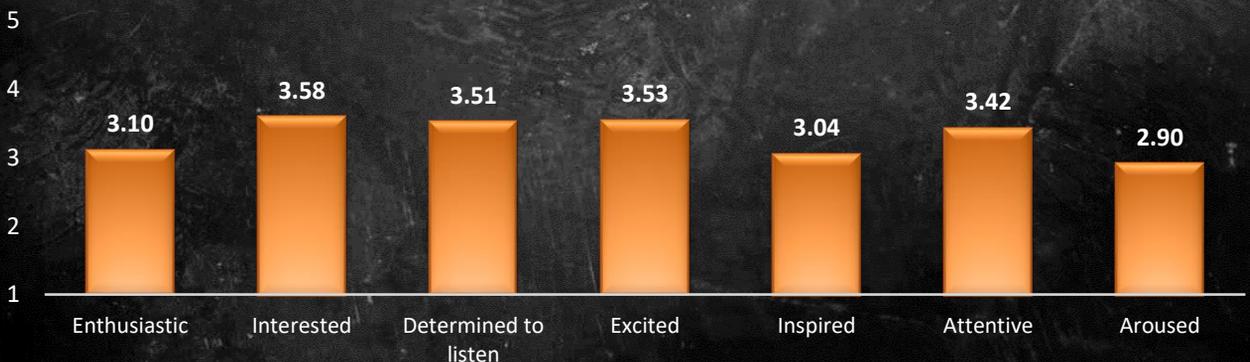
64.2%

of total respondents are interested in listening to music composed by AI

73.9%

Believe record labels should openly/clearly inform if songs or albums were written by AI.

Affective response: How do you feel about the idea of AI composing music?  
(All respondents)

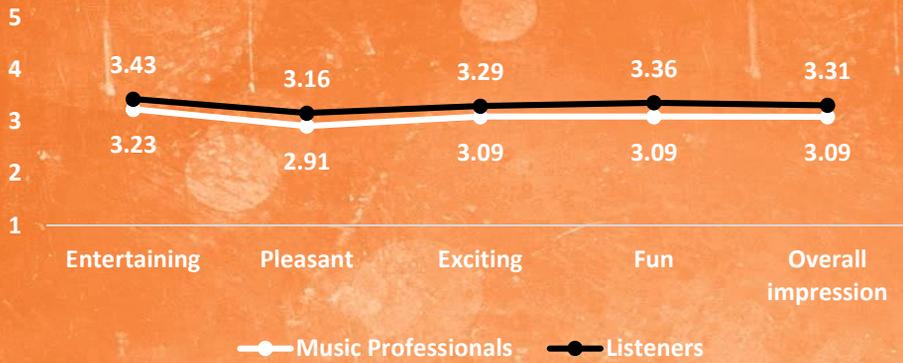


Scale ranging from 1 (Fully disagree), to 5 (Fully agree)



# 3. Attitude towards AI Composing Music

Attitude: Generally, how do you feel about AI composing music? (Music professionals and listeners)



46%

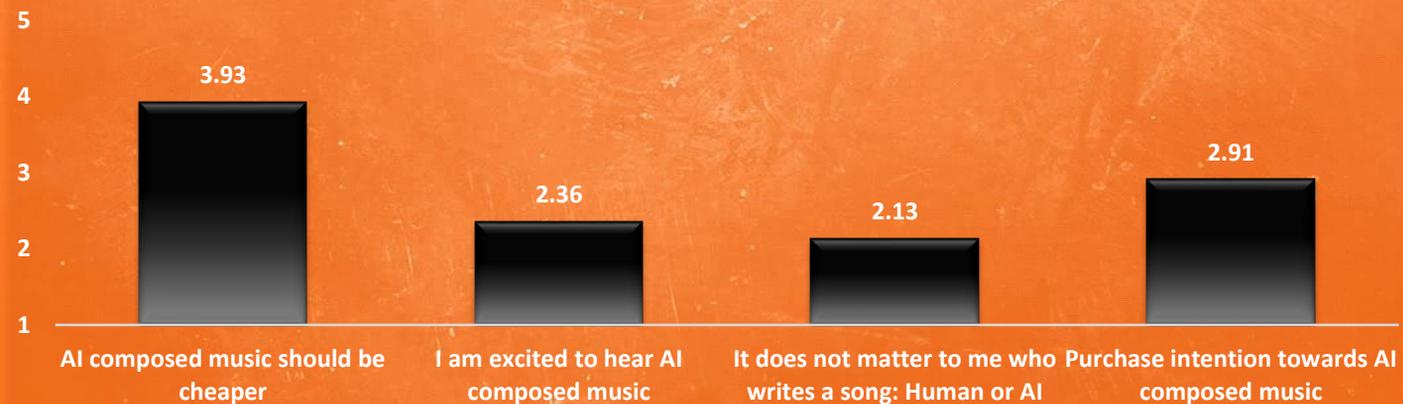
of total respondents find **exciting** the idea of AI composing music.

Scale ranging from 1 (Fully disagree), to 5 (Fully agree)

35.6%

Are curious to know more about artificial intelligence composing music.

Attitude: How do you feel about the idea of AI composing music? (All respondents)



Scale ranging from 1 (Fully disagree), to 5 (Fully agree)

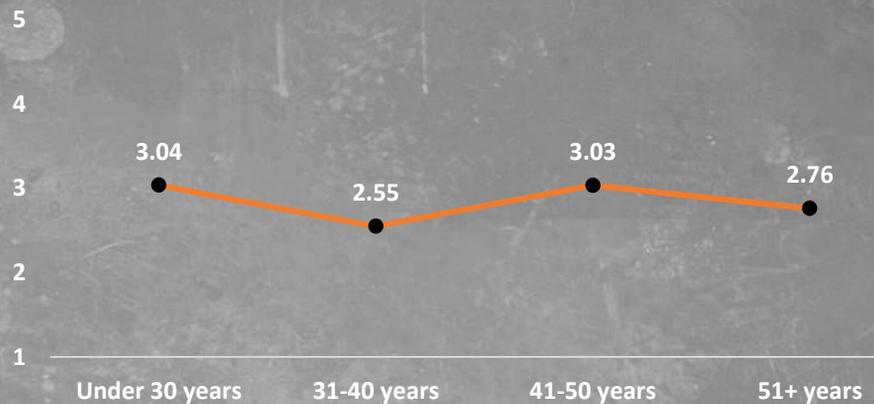


# 4. Acceptance of AI Applications

68.9%

of total respondents find it absolutely acceptable for songs in **commercials** to be composed by AI.

### Acceptance of AI by Singer/Songwriters (Age groups)

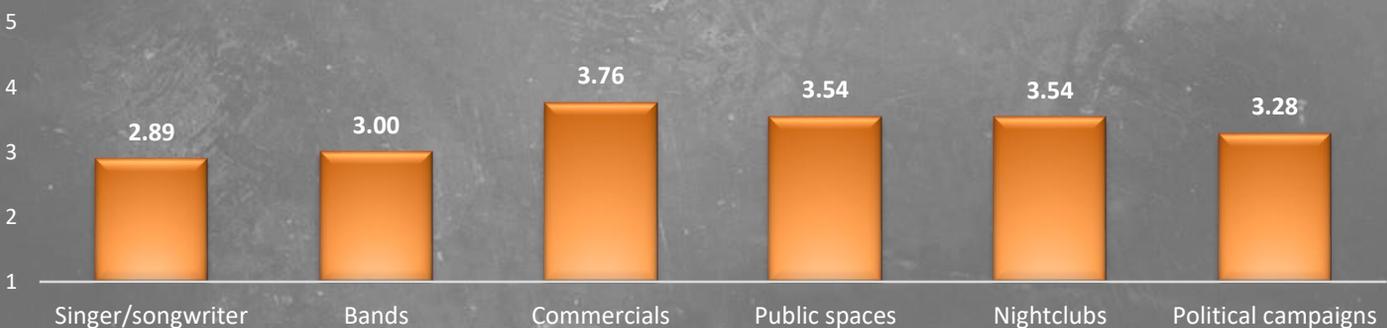


Scale ranging from 1 (Not at all acceptable), to 5 (Completely acceptable)

34.9%

Believe it is acceptable for singer/songwriters to use AI when composing songs.

## How acceptable do you feel for music produced by artificial intelligence to be used in the following contexts? (All respondents)



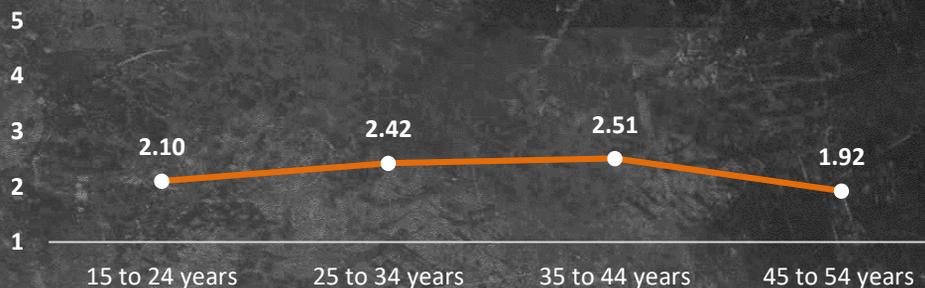
Scale ranging from 1 (Not at all acceptable), to 5 (fully acceptable)

# 5. Perceptions of Artificial Co-Creation

82.3%

of total respondents would be disappointed to constantly doubt whether a human or AI has composed a song.

I respect and admire musicians playing songs composed by artificial intelligence  
(Age comparison)

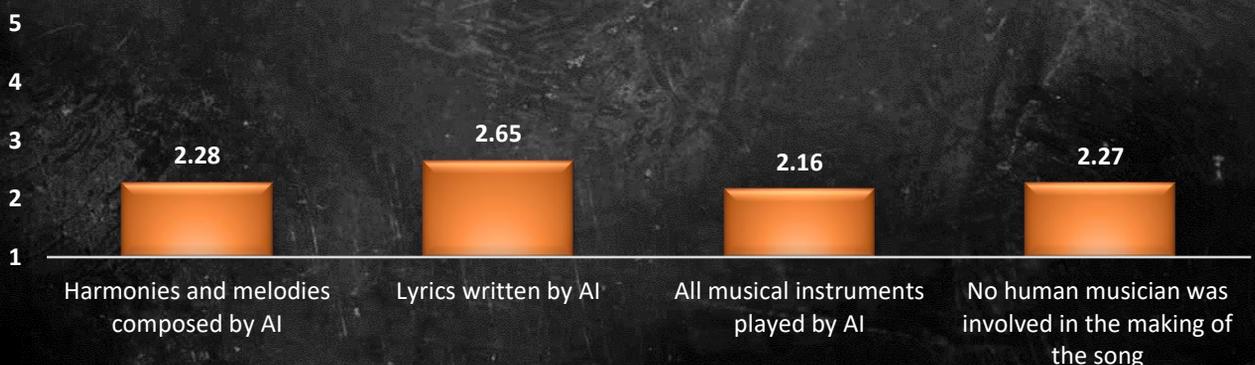


Scale ranging from 1 (Fully disagree), to 5 (Fully agree)

14.9%

Would consider a song more positively if the lyrics had been written by AI.

Imagine that you heard a new song which you absolutely loved! How would you feel if you found out that...  
(All respondents)



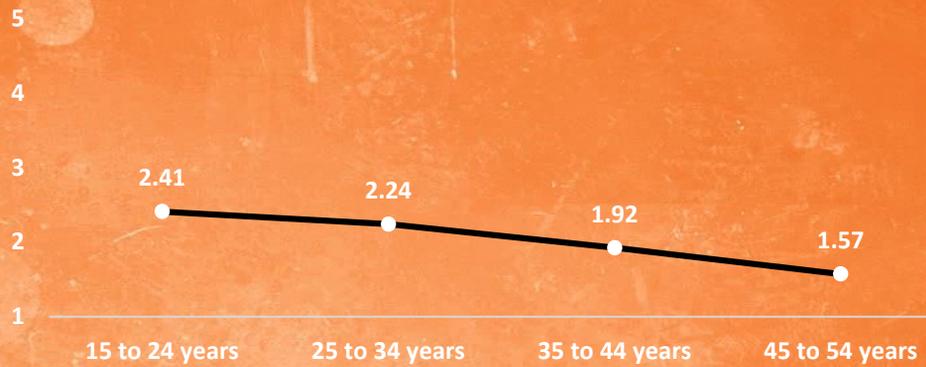
Scale ranging from 1 (Would perceive the song much more negatively), to 5 (would perceive the song much more positively)

# 6. Perceptions towards the Future

12,3%

of total respondents believe soon software will compose **better music than humans.**

Artwork created by artificial intelligence is as valuable as the ones created by humans (Age comparison)

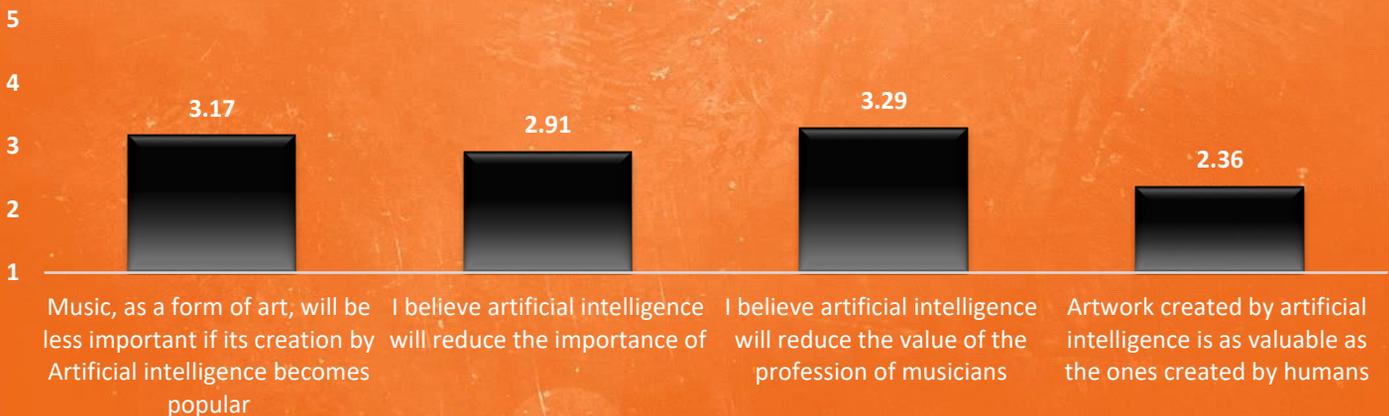


Scale ranging from 1 (Fully disagree), to 5 (Fully agree)

80,1%

Do not believe robots will become better musicians than humans.

To which extent to you agree with the following statements? (All respondents)



Scale ranging from 1 (Fully disagree), to 5 (Fully agree)



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# 7. Final Thoughts

The sample of results presented here provides relevant insights regarding the impression towards artificial intelligence and music in the German market.

Overall, results reveal a fairly negative impression towards AI composing music, especially in high-involvement contexts. This is expected, given the importance of human emotions during music compositions and consumption. For this reason, a longitudinal investigation is pivotal. Time will play an important role on acceptance.

Thus, for the moment, listeners' trust on high involvement contexts should not be ignored by the industry.

For low involvement contexts, such as commercials, the acceptance is much higher and a wide implementation in the market in the coming years is to be expected given the benefits of scale that the technology brings.

Finally, please remember: the results shown here contain limitations and these must be considered when interpreting the results. First, findings are restricted to the German market (citizens and residents) and the sample size is not representative of the population. Moreover, other constructs were measured and not included here. For example, relevant moderating factors. Finally, only descriptive findings are displayed to facilitate understanding and allow an overview of the phenomena.

Cheers!

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