Creativity and Technology in the Age of AI

Key Findings Japan
About the research:
Key facts

- Goal: gain deep understanding of the role technology plays in the creative process, and gauge attitudes to AI and ML.
- Qualitative market research.
- Covering US, Europe and Japan.
- Over 110 interviews were conducted.
- 34 interviews were conducted in Japan.
Key aspects of creativity

- There are different types of creativity.
- Creativity is profoundly human.
- Creativity is profoundly social.
- Creativity is interaction and engagement.
What technology means for creative professionals

- Creatives see technology as essential.
- Technology is there to assist and empower them, not to replace their creativity.
- Creatives are outcome-focused, not feature-focused.
- 74% of creatives spend over 50% of their time on repetitive tasks. (In Japan, this number is slightly lower, at 69%)
Do you feel your creative possibilities have increased over the past few years?

- Extremely: 8%
- Quite a lot: 13%
- To some extent: 22%
- A little bit: 57%
- Not at all: 5%

Data from Japan
How much of your work is spent on repetitive, uncreative tasks?

- 69%: 50% or more
- 31%: less than 50%

Data from Japan
Creativity and Technology in the Age of AI

Attitudes to AI and machine learning

- Creatives are aware that AI and ML are very important, although they don’t know yet how it will impact their work.
- Creatives can see the potential of AI and machine learning to help with their work.
- However, creatives want control over technology vs. the technology controlling them.
- There is clearly greater eagerness in Japan to embrace AI and ML than in the other countries surveyed.
How interested are you in AI and ML?

- Very much: 25%
- Somewhat: 34%
- A little bit: 31%
- Not at all: 9%

Data from Japan
In your opinion, how important will AI and ML be for creative professionals?

Data from Japan
Do you feel that having a headstart in AI would be valuable?

Data from Japan
What creatives think about Adobe Sensei

• After having seen stimulus videos, creatives are very interested in Adobe Sensei.
• The majority of them would like to experiment with Adobe Sensei.
• A large majority is convinced that Adobe Sensei can make them more productive.
• Many of them say Adobe Sensei can make them more creative by freeing up time for their own creativity.
From what you have seen, how interesting is Adobe Sensei for you?

- Extremely: 67%
- Quite a lot: 18%
- To some extent: 9%
- A little bit: 5%
- Not at all: 0%

Data from Japan
Do you think Adobe Sensei can make you more efficient, productive?

- Extremely: 50%
- Quite a lot: 28%
- To some extent: 9%
- A little bit: 13%
- Not at all: 0%

Data from Japan
Do you think Adobe Sensei can make you more creative?

Data from Japan
Attitudes to creative assistants and voice interfaces

- The majority of creatives would work with a creative assistant — provided they could control when and how it intervenes.
- A large majority of creatives would welcome a creative assistant that reduces drudgery.
- Assistance with search for stock images and other material would be highly appreciated.
Could you imagine working with an AI/ML based creative assistant?

Data from Japan
How interested are you in an assistant that ...

- provides creative variations
- evaluates audience response
- helps with image search
- teaches new features
- reduces drudgery

Data from Japan

88%  78%  91%  73%  72%
**How do you feel about using your voice to control the computer?**

- **56%** Extremely
- **13%** Quite a lot
- **13%** to some extent
- **13%** A little bit
- **12%** Not at all

Data from Japan
Key concerns of creatives about AI and machine learning

- Most creatives do not fear that their jobs will be replaced by AI.
- They do recognize that the ways they work and how they spend their time will change.
- There is real concern that AI and machine learning could lead to homogenization of visual output, and might devalue their skills.
- Privacy and responsible use of data that might be collected through machine learning are also frequently mentioned.
- While these concerns were mentioned, they were much less strongly expressed in the interviews conducted in Japan.
How afraid are you that AI could threaten your job?

- Extremely: 3%
- Quite a lot: 4%
- To some extent: 9%
- A little bit: 19%
- Not at all: 84%

Data from Japan
Conclusion

- AI is about detecting patterns, while creativity often implies breaking them in unexpected ways.
- AI and machine learning can help creatives keep up with the ever-increasing demand to produce more, faster.
- AI has the potential to alleviate many tasks that are perceived as tedious or repetitive.
- With the help of AI and machine learning, ML-based creative assistants have the potential to significantly speed up these tasks.
- This allows creative professionals to increase the focus on their personal creativity, bold new ideas, and better client collaboration.
Key differences between Japan and US/EMEA

- The researched revealed several significant differences between the US/EMEA and Japan.
- Key differences concern attitudes to AI and machine learning, creative digital assistants and voice control.
- Attitudes to creativity are also quite different in the West and in Japan.
- Japanese creatives are clearly very open to technology developments and are eager to embrace them.
- Different attitudes to creativity also result in fewer concerns about negative effects of AI and ML on creative professionals.
On-line resources are rarely cited as sources for inspiration.
A majority of creatives in Japan had heard about Adobe Sensei.
Most respondents in Japan believe that Adobe Sensei can make them more creative.
Willingness to work with a creative digital assistant is clearly higher in Japan than in other countries.

**Could you imagine working with an AI/ML based creative assistant?**

**US+EMEA**
- Extremely: 23%
- Quite a lot: 19%
- To some extent: 8%
- A little bit: 16%
- Not at all: 8%

**Japan**
- Extremely: 3%
- Quite a lot: 22%
- To some extent: 50%
- A little bit: 18%
- Not at all: 3%
Japanese creatives showed great interest in an assistant providing creative variations.
Respondents in Japan were enthusiastic about all suggested creative assistants.

How interested are you in an assistant that …

<table>
<thead>
<tr>
<th>Provides creative variations</th>
<th>Evaluates audience response</th>
<th>Helps with image search</th>
<th>Teaches new features</th>
<th>Reduces drudgery</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US+EMEA</strong></td>
<td>89%</td>
<td>81%</td>
<td>77%</td>
<td>53%</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>88%</td>
<td>78%</td>
<td>91%</td>
<td>53%</td>
</tr>
</tbody>
</table>
Japanese creatives are exceptionally open to using a voice interface to control the computer.
There is very little concern by creatives in Japan that AI could threaten their job.
Complete Results (US+EMEA compared to Japan)
Rate your current workflow in terms of efficiency, productivity and creativity

US+EMEA

- Extremely: 7%
- Quite a lot: 8%
- To some extent: 48%
- A little bit: 37%
- Not at all: 7%

Japan

- Extremely: 16%
- Quite a lot: 38%
- To some extent: 41%
- A little bit: 7%
- Not at all: 3%
Where do you find inspiration?

US+EMEA

- Art, books, films…: 30%
- On-line resources: 28%
- Real world, nature, contacts: 7%
- Other: 35%

Japan

- Art, books, films…: 14%
- On-line resources: 5%
- Real world, nature, contacts: 39%
- Other: 42%
How efficient is the computer/software in making creativity happen?

**US+EMEA**
- Extremely: 40%
- Quite a lot: 23%
- To some extent: 33%
- A little bit: 4%
- Not at all: 3%

**Japan**
- Extremely: 41%
- Quite a lot: 22%
- To some extent: 34%
- A little bit: 3%
- Not at all: 23%
What do you fear the most during a creative project?

**US+EMEA**
- Technical issues: 47%
- Problems linked to creativity: 43%
- Client-related problems: 12%

**Japan**
- Technical issues: 38%
- Problems linked to creativity: 43%
- Client-related problems: 19%

What kind of creative work would you like to do if it were easier?
What do you find tedious in your work?

- Administrative tasks: 19%
- Client-related issues: 15%
- Process Management: 23%
- Repetitive, uninspiring work: 24%
- Solving technical issues: 24%

US+EMEA

What do you find tedious in your work?

- Administrative tasks: 13%
- Client-related issues: 15%
- Process Management: 19%
- Repetitive, uninspiring work: 34%
- Solving technical issues: 24%

Japan
Do you feel that the software you use should have better understanding of your workflow?

**US+EMEA**
- Extremely: 12%
- Quite a lot: 18%
- To some extent: 26%
- A little bit: 29%
- Not at all: 15%

**Japan**
- Extremely: 6%
- Quite a lot: 7%
- To some extent: 33%
- A little bit: 21%
- Not at all: 26%
Has your work become more complex over the past few years?

**US+EMEA**
- Extremely: 13%
- Quite a lot: 25%
- To some extent: 20%
- A little bit: 14%
- Not at all: 33%

**Japan**
- Extremely: 13%
- Quite a lot: 25%
- To some extent: 13%
- A little bit: 6%
- Not at all: 31%
Do you feel your creative possibilities have increased over the past few years?

US+EMEA:
- Extremely: 37%
- Quite a lot: 22%
- To some extent: 15%
- A little bit: 13%
- Not at all: 8%

Japan:
- Extremely: 39%
- Quite a lot: 15%
- To some extent: 13%
- A little bit: 4%
- Not at all: 5%
How interested are you in AI and ML?

**US+EMEA**
- Very much: 31%
- Somewhat: 12%
- A little bit: 19%
- Not at all: 38%

**Japan**
- Very much: 25%
- Somewhat: 34%
- A little bit: 9%
- Not at all: 31%
Have you heard about Adobe Sensei?

US+EMEA

- A lot: 37%
- A little bit: 36%
- Not at all: 27%

Japan

- A lot: 37%
- A little bit: 36%
- Not at all: 27%
From what you have seen, how interesting is Adobe Sensei for you?

US+EMEA

- Extremely
- Quite a lot
- To some extent
- A little bit
- Not at all

- 67%
- 5%
- 9%
- 18%

Japan

- Extremely
- Quite a lot
- To some extent
- A little bit
- Not at all

- 66%
- 5%
- 9%
- 18%
Do you think Adobe Sensei can make you more creative?

US+EMEA

- Extremely: 13%
- Quite a lot: 24%
- To some extent: 30%
- A little bit: 18%
- Not at all: 15%

Japan

- Extremely: 15%
- Quite a lot: 42%
- To some extent: 9%
- A little bit: 18%
- Not at all: 6%

Creativity and Technology in the Age of AI (Key Findings Japan) - 45
Do you think Adobe Sensei can make you more efficient, productive?

**US+EMEA**

- Extremely: 62%
- Quite a lot: 24%
- To some extent: 11%
- A little bit: 3%
- Not at all: 3%

**Japan**

- Extremely: 28%
- Quite a lot: 24%
- To some extent: 9%
- A little bit: 8%
- Not at all: 9%
In your opinion, how important will AI and ML be for creative professionals?

**US+EMEA**

- Extremely: 34%
- Quite a lot: 28%
- To some extent: 27%
- A little bit: 7%
- Not at all: 6%

**Japan**

- Extremely: 41%
- Quite a lot: 25%
- To some extent: 6%
- A little bit: 6%
- Not at all: 22%

**Key Findings Japan**
Do you feel that having a headstart in AI would be valuable?

**US+EMEA**

- Extremely: 49%
- Quite a lot: 18%
- To some extent: 17%
- A little bit: 10%
- Not at all: 6%

**Japan**

- Extremely: 72%
- Quite a lot: 15%
- To some extent: 12%
- A little bit: 10%
- Not at all: 17%

**Creativity and Technology in the Age of AI (Key Findings Japan)**
Could you imagine working with an AI/ML based creative assistant?

US+EMEA

- 23% Extremely
- 16% Quite a lot
- 19% to some extent
- 9% A little bit
- 34% Not at all

Japan

- 22% Extremely
- 25% Quite a lot
- 50% to some extent
- 8% A little bit
- 3% Not at all
How interested are you in an assistant that reduces dudgery?

**US+EMEA**
- Extremely: 24%
- Quite a lot: 24%
- To some extent: 13%
- A little bit: 7%
- Not at all: 4%

**Japan**
- Extremely: 19%
- Quite a lot: 13%
- To some extent: 70%
- A little bit: 4%
- Not at all: 24%

Creativity and Technology in the Age of AI (Key Findings Japan) - 50
How interested are you in an assistant that suggests creative variations?

US+EMEA

- Extremely: 23%
- Quite a lot: 24%
- To some extent: 19%
- A little bit: 22%
- Not at all: 12%

Japan

- Extremely: 47%
- Quite a lot: 25%
- To some extent: 16%
- A little bit: 8%
- Not at all: 6%
How interested are you in an assistant that teaches you new features?

**US+EMEA**

- Extremely: 47%
- Quite a lot: 31%
- To some extent: 13%
- A little bit: 6%
- Not at all: 3%

**Japan**

- Extremely: 45%
- Quite a lot: 36%
- To some extent: 8%
- A little bit: 7%
- Not at all: 8%
How interested are you in an assistant that helps you finding the right material?

**US+EMEA**

- Not at all: 31%
- A little bit: 12%
- To some extent: 5%
- Quite a lot: 6%
- Extremely: 5%

**Japan**

- Not at all: 69%
- A little bit: 3%
- To some extent: 6%
- Quite a lot: 6%
- Extremely: 22%
How interested are you in an assistant that helps you predict audience reactions?

**US+EMEA**
- Extremely: 35%
- Quite a lot: 18%
- To some extent: 18%
- A little bit: 12%
- Not at all: 6%

**Japan**
- Extremely: 46%
- Quite a lot: 12%
- To some extent: 9%
- A little bit: 27%
- Not at all: 6%
How do you feel about using your voice to control the computer?

**US+EMEA**
- Extremely: 15%
- Quite a lot: 12%
- To some extent: 15%
- A little bit: 5%
- Not at all: 5%

**Japan**
- Extremely: 13%
- Quite a lot: 6%
- To some extent: 12%
- A little bit: 13%
- Not at all: 56%
What kind of creative work would you like to do if it were easier?

US+EMEA

- Video: 27%
- Motion graphics: 20%
- 3D: 29%
- AR/VR: 9%
- Coding: 11%

Japan

- Video: 26%
- Motion graphics: 17%
- 3D: 19%
- AR/VR: 9%
- Coding: 8%
How afraid are you that AI could threaten your job?

US+EMEA

- Extremely: 9%
- Quite a lot: 7%
- To some extent: 19%
- A little bit: 11%
- Not at all: 54%

Japan

- Extremely: 4%
- Quite a lot: 3%
- To some extent: 9%
- A little bit: 54%
- Not at all: 84%
How interested are you in an assistant that …

- provides creative variations
- evaluates audience response
- helps with image search
- teaches new features
- reduces drudgery

**US+EMEA**

- 89%
- 81%
- 77%
- 53%
- 42%

**Japan**

- 88%
- 78%
- 91%
- 73%
- 72%
How much of your work is spent on repetitive, uncreative tasks?

US+EMEA

- 74%: 50% or more
- 26%: less than 50%

Japan

- 69%: 50% or more
- 31%: less than 50%