IWA OUTDOOR CLASSICS VISION

AI IN THE WILD

A white paper on the impact of AI in the hunting industry

FUTURE INSIGHT

HOW AI CAN ENHANCE THE HUNTING WORLD

In recent years, AI has emerged as a powerful force that is influencing our world in transformative ways. Unlike previous technologies, AI is characterized by its ability to learn autonomously, recognize patterns and make decisions.

Prominent examples include autonomous driving, which is currently being driven forward at full speed by companies like Tesla, BYD, and many other car manufacturers.

AI has also opened a new door for marketing:
By entering keywords, artificial intelligence can generate almost anything we can imagine – from text to images to movies.

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WHAT MAKES AI SYSTEMS SPECIAL COMPARED TO PREVIOUS TECHNOLOGIES?

1. AI systems can learn and adapt to new situations. This means that they get better and better over time and can adjust to changing conditions.

2. AI systems can perform complex tasks that are difficult or impossible for humans. This means that they can take on tasks that are too dangerous, too time-consuming or too error-prone for humans.

FROM CAMOUFLAGE > > TO CODE /

AI BECOMES THE ULTIMATE HUNTING COMPANION

In the intricate dance between tradition and technology, the hunting industry finds itself at the forefront of a transformative journey with the integration of artificial intelligence. Harnessing the power of algorithms and machine learning, AI is enriching the hunting experience in unprecedented ways.

Precision tracking, data-driven insights, and adaptive strategies are redefining the hunter's approach, ensuring a symbiotic relationship between humanity and the natural world.

THE BRANCH OPINION

In a study conducted in the USA, 85 percent of the 1,500 hunters surveyed said they welcomed new technologies that would help them improve their hunting success.

Source: "Hunters' Attitudes Toward the Use of New Technologies in Hunting" by David J. Decker, Michael L. Peterson, and David J. Decker Jr. Published in the journal "Wildlife Society Bulletin" in 2019.

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1 **MORE EFFICIENCY**

AI refines hunting with precise tracking, data insights, and ethical strategies, boosting efficiency by predicting wildlife patterns and optimizing resource use.

2 **MORE SAFETY**

AI enhances hunting safety with smart tracking, risk analysis, and ethical practices, ensuring responsible engagements with wildlife and minimizing potential hazards.

3 **MORE SUSTAINABILITY**

AI fosters a balanced and responsible ecosystem by optimizing resource use and contributing to wildlife conservation through data-driven insights.

MORE EFFICIENCY

AI'S IMPACT ON SUCCESSFUL AND RESPONSIBLE HUNTING

From advanced wildlife monitoring to intelligent target acquisition, AI-powered technologies are revolutionizing hunting. For example, AI-powered cameras and sensors can be deployed in hunting areas to monitor wildlife movements and behavior.

Machine learning algorithms can analyze this data to predict the best times and locations for successful hunting, enhancing the overall efficiency of the hunting process.

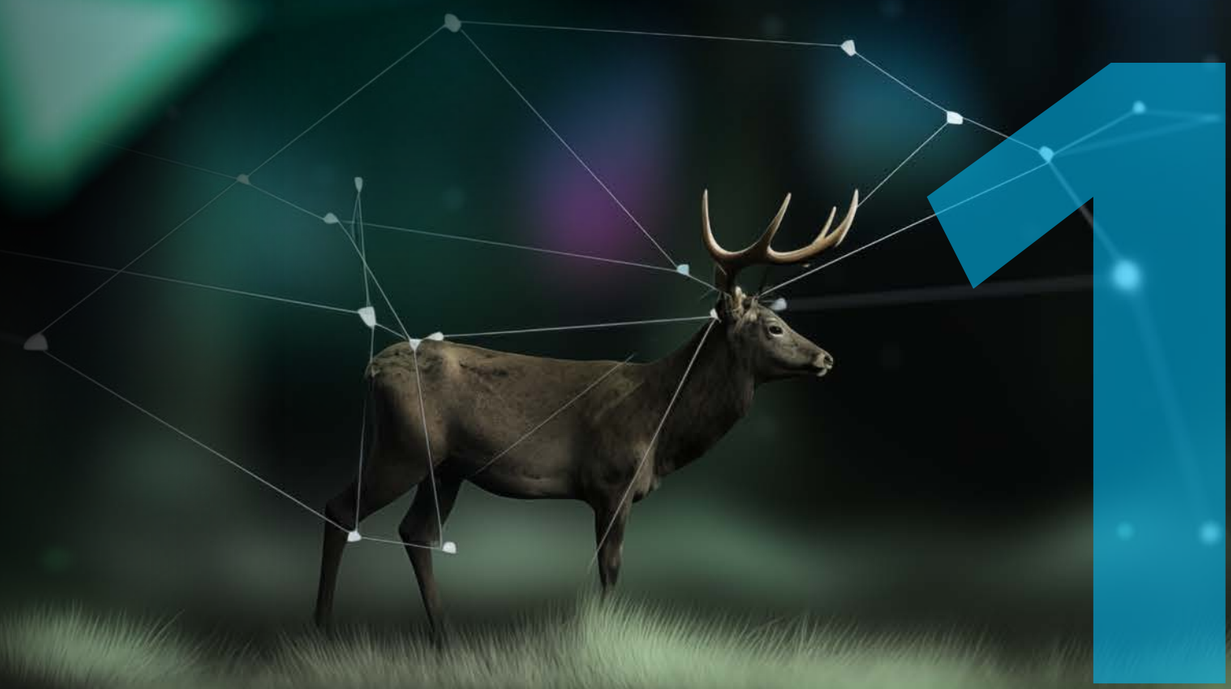
EXAMPLE FROM THE FIELD

Smart rifle scope from ATN:
AI algorithms support the hunter in calculating the distance to the target in order to fire precise shots.

Source: https://www.atncorp.com/smart-hd-optics

FIELDS OF AI APPLICATION

- HUNT ORGANIZATION AND EMERGENCY MANAGEMENT
- ENVIRONMENTAL MONITORING AND FOREST CONVERSION
- WILDLIFE DETECTION
- WILDLIFE MANAGEMENT
- SHOOTING RANGE ANALYSIS
- WILDLIFE MONITORING



MORE SAFETY

AI AS A BOOSTER OF THE HUNTERS' FINE INSTINCTS

Smart surveillance systems
AI-powered surveillance cameras can detect suspicious activity and automatically generate alerts, increasing security in public spaces, including nature reserves.

Predictive maintenance for equipment
By integrating AI into the maintenance of hunting equipment, predictive maintenance can be performed to minimize accidents and breakdowns.

Drone technology
Drones with AI can be used to monitor large areas to combat poaching and protect wildlife, while ensuring the safety of rangers and hunters.

Biometric access control
In hunting reserves, biometric AI-driven access control can ensure that only authorized people have access, minimizing the risk of unwanted intruders.

Communication enhancements
AI can be integrated into communication systems to provide fast and reliable alerts or emergency notifications, especially in remote hunting areas.

SAFETY IS THE TREND

Hunting accidents in Germany, Austria and Switzerland		**2023**	2022
	Humans fatally injured	**3**	5
	Humans injured	**5**	15
	(Wrong) animals fatally injured	**3**	3

Source: Peta – https://www.peta.de/themen/jagdunfaelle/

MORE SUSTAINABILITY

HOW AI TECHNOLOGIES BLEND IN NATURALLY WITH HUNTING.

1. Using advanced wildlife monitoring systems, AI analyzes movement patterns and behaviors, allowing hunters to develop more efficient strategies.
2. Smart target recognition systems reduce the risk of catching protected species and therefore promote ethical hunting practices.
3. AI optimizes hunting equipment, minimizes unnecessary animal suffering and improves accuracy.
4. Analyses of historical hunting data enable accurate predictions of poaching harvests, support sustainable wildlife management and help maintain a balanced ecosystem.

PRACTICAL EXAMPLE

“Using drones with AI-powered cameras to monitor wildlife populations”

In a study from the University of Wisconsin, a team of researchers investigated the possibility of using AI-powered drones to monitor wildlife populations.

STUDY

The study was conducted in a forest area in the U.S. state of Wisconsin. The team used a drone with an AI-powered camera to detect and count wildlife. The drone was equipped with a camera that could record images in real time and send them to a computer. The AI software on the computer could then analyze the images and identify wildlife.

RESULT

The drone was able to recognize wildlife with an accuracy of 95 percent. It was also able to recognize wildlife in different environments, including dense forest.

Source: https://arxiv.org/abs/2303.07176

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THE TWO SIDES OF THE AI COIN

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The use of AI in hunting is a complex issue that needs to be carefully considered. There are both ethical and practical challenges that need to be studied.

It’s important for AI systems to be developed in such a way that they ensure animal welfare, are fair, clearly define responsibility, ensure data protection, and are transparent.

PRACTICAL CHALLENGES

Cost

AI systems can be expensive. It is important that the cost of using AI in hunting is affordable so that it’s accessible to all hunters.

Infrastructure

AI systems require good infrastructure to function. This can be a problem in remote areas where there are no good Internet connections or other infrastructure.

Training

Hunters need to be able to operate and understand AI systems. It’s essential for hunters to have the necessary training so they can use AI systems safely and effectively.

ETHICAL CHALLENGES

Animal welfare

AI systems can be used to find and track wild animals. This can lead to a higher hunting rate, which can raise animal welfare concerns.

Responsibility

It’s important for hunters to understand how AI systems work and how they make decisions.

Data protection

AI systems require large amounts of data in order to learn and function. This data may contain sensitive information about wildlife or hunters. It’s crucial important to ensure the privacy of this data.

BYTE THE BULLET

BOOSTING SALES INTO THE FUTURE WITH AI

B2B selling has never been easy. However, today's buyers are even more demanding: they are smarter, better informed and do their research before contacting a salesperson. They want personalized experiences based on their individual needs, which means a greater workload for the sales department. Customers want to be impressed, but it's becoming increasingly difficult to do that. What's the solution?

AI is set to redefine the arms-trade landscape at every level. Nonetheless, it's essential for each company to openly and transparently evaluate what strategies are truly beneficial and purposeful for them.

Prof. Dr. Stephan G. Humer,
Professor of Digital Security Research
at the Fresenius University of Applied Sciences, Berlin

Source: https://www.yumpu.com/de/document/read/68410537/waffenmarkt-intern-0923/12, p. 13

Automated lead qualification

By analyzing interactions and behavioral patterns, AI identifies potential customers who are most likely to convert.

Customer profile optimization

AI can use data analytics to create detailed customer profiles that improve the understanding of hunters' preferences and needs, resulting in personalized offers.

Demand forecasting

By analyzing historical data, AI can make accurate predictions about the demand for specific hunting products, enabling an optimized inventory and product availability.

Dynamic pricing

AI can analyze market trends, competitor pricing, and customer demand in real time in order to recommend optimal pricing strategies.

AI-powered influencer marketing

AI can help identify and connect with the most relevant and impactful influencers for your brand based on their audience demographics, engagement levels, and brand affinity.

RETAIL RELOADED

FACTS AND FIGURES ABOUT RETAIL IN HUNTING

THREE INTERESTING STUDIES

97% of business owners believe that ChatGPT will benefit their business

One in three businesses plan to use ChatGPT to create Website content, while 44 percent plan to create content in multiple languages.

64% of business owners believe that AI will improve customer relationships

Forbes Advisor reports that 64 percent of business owners believe that AI has the potential to improve customer relationships, indicating a positive attitude towards AI's role in improving customer interactions.

Over 60% of business owners say that AI will increase productivity

Specifically, 64 percent said that AI would improve business productivity and 42 percent believe that it will streamline work processes.

Source: https://www.forbes.com/advisor/de/business/software/kuenstliche-intelligenz-ki-trends-statistiken

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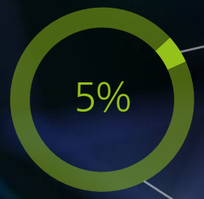
EXCLUSIVE SURVEYS OF THE VDB 2024:
USE OF AI IN HUNTING RETAIL

HOW WOULD YOU BEST DESCRIBE THE USE OF ARTIFICIAL INTELLIGENCE IN YOUR BUSINESS?

We are planning to use AI in the near future

We are currently switching to AI-based systems



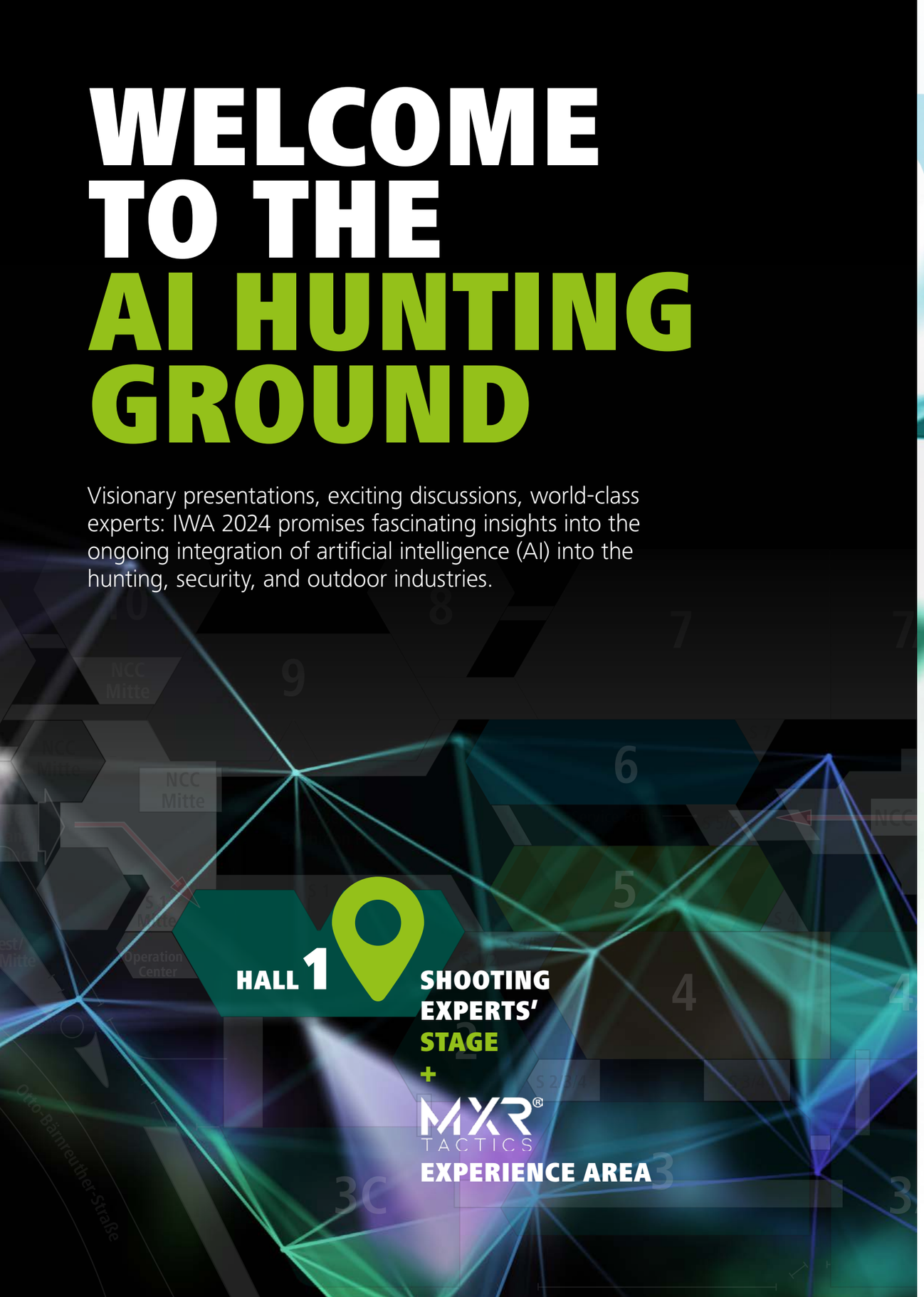
We have already integrated AI into our sales

We continue to sell our products in the traditional way

CONCLUSION:
About one in six retailers is getting involved with AI, with only a small minority having integrated fixed processes into their business operations. When AI is used, it is mainly ChatGPT for the wording of newsletters.

WELCOME TO THE AI HUNTING GROUND

Visionary presentations, exciting discussions, world-class experts: IWA 2024 promises fascinating insights into the ongoing integration of artificial intelligence (AI) into the hunting, security, and outdoor industries.



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Discuss innovations at the
MXR TACTICS EXPERIENCE AREA

SHOOTING EXPERTS' STAGE

THE PLACE TO BE FOR FUTURE-ORIENTED PROFESSIONALS

Listen to Prof. Dr. Stephan G. Humer, Professor at Fresenius University of Applied Sciences in Berlin, on the topic of

"ARTIFICIAL INTELLIGENCE IN THE FIREARMS TRADE SECTOR: CURRENT STATUS, FUTURE, ILLUSIONS"

Date: 29.02.2024
Time: 14:00–14:30

Look forward to the presentation by MXR Tactics and Amy 9x19 on the topic

"AI IN SHOOTING TRAINING"

Get inspired and discover many other exciting topics

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YOUR PATH TO IWA

INFORMATION REGARDING LEGITIMATION AS A TRADE VISITOR CAN BE FOUND AT:
www.iwa.info/en/eyesontarget

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