nsoft

# Compliance issues through developing software for facial, age and gender recognition

19/10/18

1

## Presentation Agenda

01 Introduction about NSoft and Vision

02 GDPR and biometric data

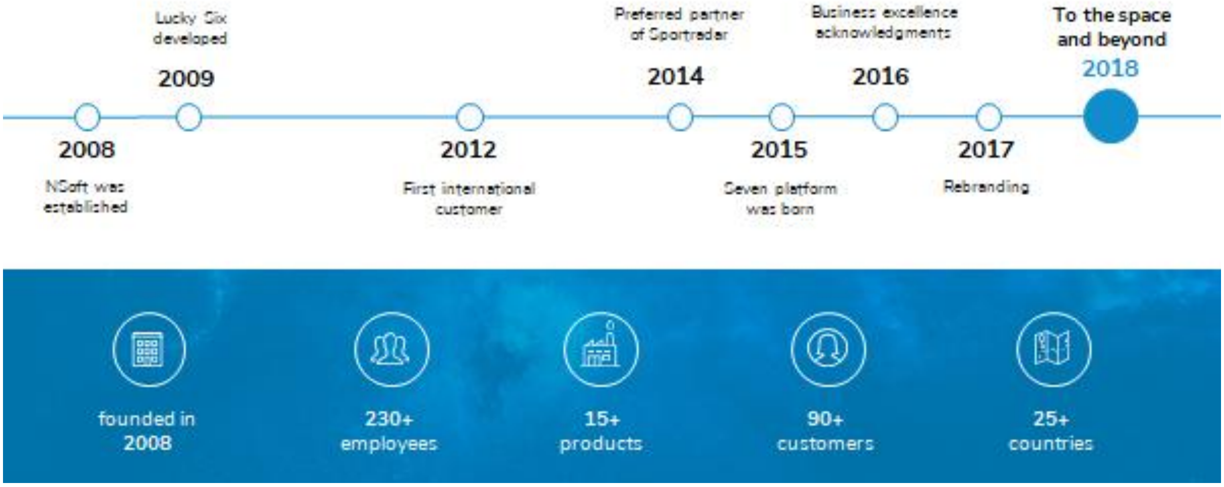
03 Internal Compliance standards

04 Lex ferenda

nsoft

2

# Our galaxy



Lucky Six developed
2009

2008
NSoft was established

2012
First international customer

Preferred partner of Sportradar
2014

2015
Seven platform was born

Business excellence acknowledgments
2016

2017
Rebranding

To the space and beyond
2018

founded in 2008

230+ employees

15+ products

90+ customers

25+ countries

3

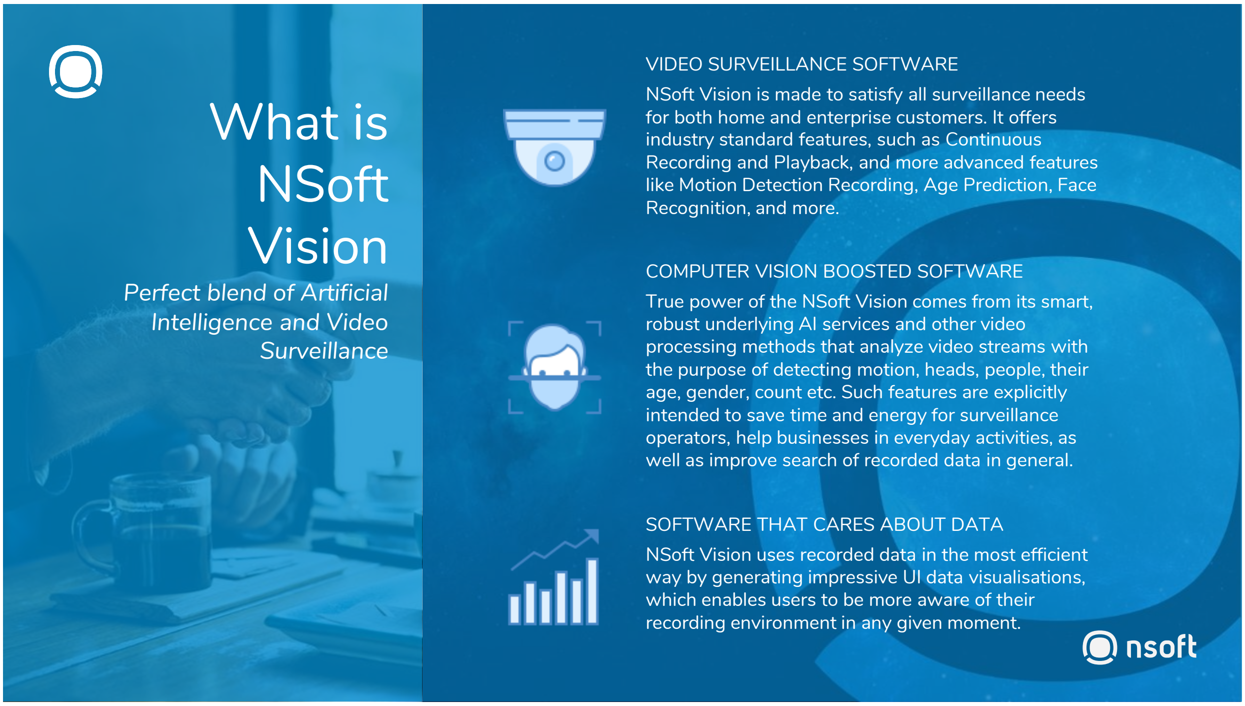
# NSoft Mission and Vision

- NSoft will create the highest quality software that is driven by data, analytics, research, intuition and insight stemming from our extensive know-how and uniquely skilled community.

- By 2022 we are to become globally-known as the first stop-shop for businesses in search of innovative software suites that simplify their existence.

nsoft

4



# What is NSoft Vision

*Perfect blend of Artificial Intelligence and Video Surveillance*

VIDEO SURVEILLANCE SOFTWARE

NSoft Vision is made to satisfy all surveillance needs for both home and enterprise customers. It offers industry standard features, such as Continuous Recording and Playback, and more advanced features like Motion Detection Recording, Age Prediction, Face Recognition, and more.

COMPUTER VISION BOOSTED SOFTWARE

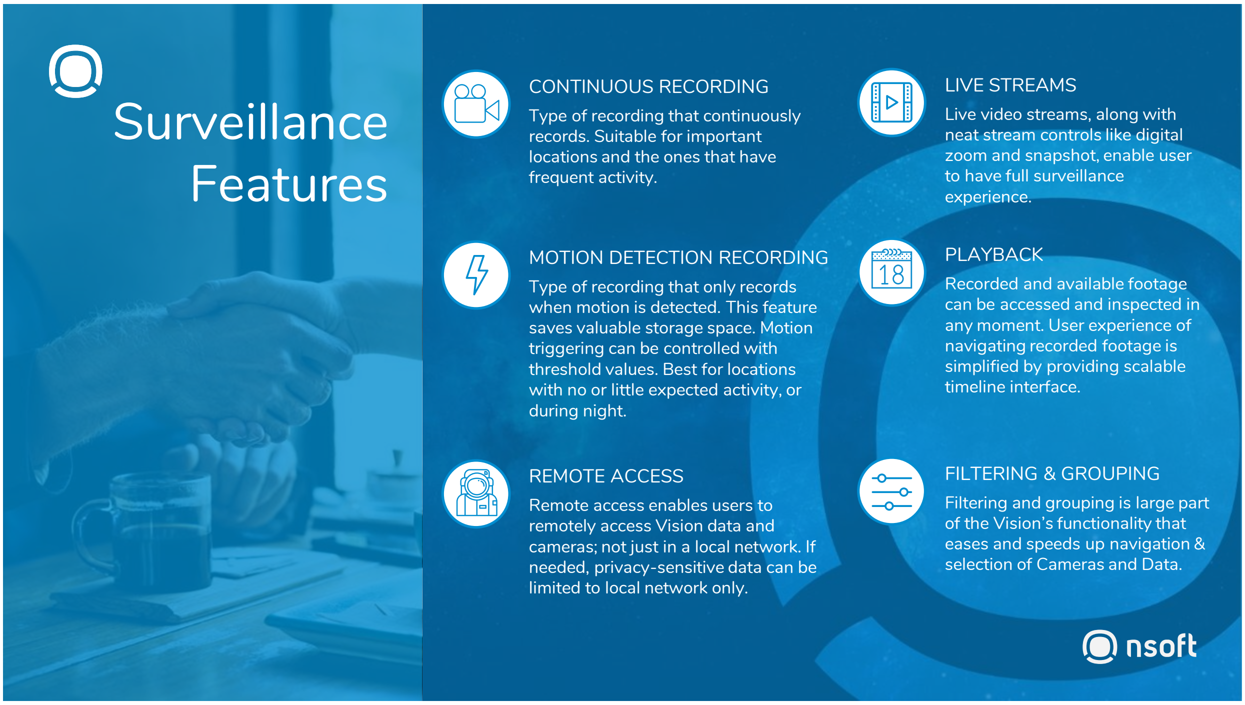
True power of the NSoft Vision comes from its smart, robust underlying AI services and other video processing methods that analyze video streams with the purpose of detecting motion, heads, people, their age, gender, count etc. Such features are explicitly intended to save time and energy for surveillance operators, help businesses in everyday activities, as well as improve search of recorded data in general.

SOFTWARE THAT CARES ABOUT DATA

NSoft Vision uses recorded data in the most efficient way by generating impressive UI data visualisations, which enables users to be more aware of their recording environment in any given moment.

nsoft

5



# Surveillance Features

CONTINUOUS RECORDING

Type of recording that continuously records. Suitable for important locations and the ones that have frequent activity.

MOTION DETECTION RECORDING

Type of recording that only records when motion is detected. This feature saves valuable storage space. Motion triggering can be controlled with threshold values. Best for locations with no or little expected activity, or during night.

REMOTE ACCESS

Remote access enables users to remotely access Vision data and cameras; not just in a local network. If needed, privacy-sensitive data can be limited to local network only.

LIVE STREAMS

Live video streams, along with neat stream controls like digital zoom and snapshot, enable user to have full surveillance experience.

PLAYBACK

Recorded and available footage can be accessed and inspected in any moment. User experience of navigating recorded footage is simplified by providing scalable timeline interface.

FILTERING & GROUPING

Filtering and grouping is large part of the Vision's functionality that eases and speeds up navigation & selection of Cameras and Data.

nsoft

6

FACE DETECTION

Ability to detect and track faces in real-time - while the camera records certain premises.

FACE RECOGNITION

Ability to instantly identify people while camera records.

HEAD DETECTION

Ability to detect heads, even if people are not looking at the camera.

PEOPLE COUNTING

Ability to count people present in the camera's field of view.

SIMILAR PEOPLE

Ability to provide a list of people that look similar to a certain person.

AGE & GENDER PREDICTION

Ability to analyze, in real-time, facial characteristics of people visiting certain premises, and then predict their age and gender.

*These features are constantly getting better thanks to Machine Learning. At the same time, new features (like Area Search and Heat Map) are being developed.*

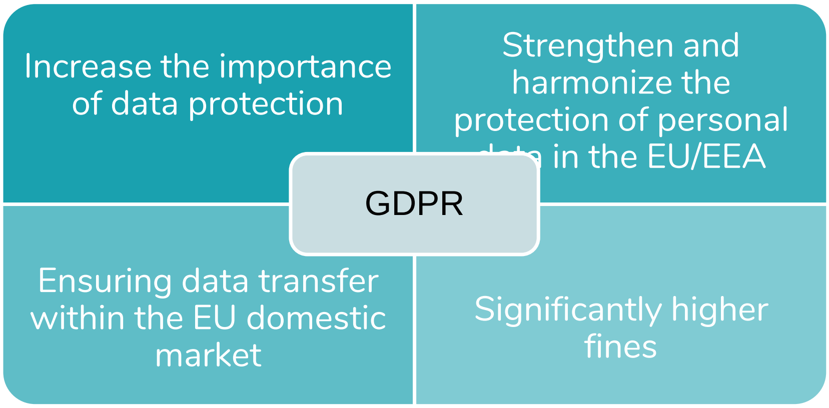
*With the use of AI features, collected real-time and historical data aims to empower data-driven decision making processes.*

# Artificial Intelligence Features

nsoft

7

# GDPR and Biometric data



Increase the importance of data protection

Strengthen and harmonize the protection of personal data in the EU/EEA

GDPR

Ensuring data transfer within the EU domestic market

Significantly higher fines

nsoft

8

# GDPR and Biometric data

- First year of GDPR:
- 144,000+ GDPR complaints have been filed to date
- 1 GDPR complaint filed every 4 minutes
- 89,000+ data breaches reported to date
- One data breach was reported every 6 minutes
- In Germany, an average of 45 data breaches were reported every day

nsoft

9

# GDPR and Biometric data

- What is personal data?
- Name? Surname? Photography of a crowd? Postcode? E-mail address?
- Personal data are any information which are related to an identified or identifiable natural person.

nsoft

10

# GDPR and Biometric data

- Biometric data has a long history.
- Biometric data is considered “sensitive data”
- Biometric data are personal data resulting from specific technical processing relating to the physical, physiological or behavioural characteristics of a natural person, which allow or confirm the unique identification of that natural person, such as facial images or dactyloscopic data.” (GDPR Article 4(14))

nsoft

11

# GDPR and Biometric data

- Is a photograph biometric data always?
- The processing of photographs should not systematically be considered to be processing of special categories of personal data as they are covered by the definition of biometric data only when processed through a specific technical means allowing the unique identification or authentication of a natural person.

nsoft

12

# GDPR and Biometric data

- Legal ground for processing Biometric data:

a) the data subject has given explicit consent to the processing of those personal data for one or more specified purposes;
b) processing is necessary for the purposes of carrying out the obligations and exercising specific rights of the controller or of the data subject in the field of employment and social security
c) processing is necessary to protect the vital interests of the data subject or of another natural person where the data subject is physically or legally incapable of giving consent;

13

# GDPR and Biometric data

d) processing is carried out in the course of its legitimate activities with appropriate safeguards by a foundation, association or any other not-for-profit body;
e) processing relates to personal data which are manifestly made public by the data subject;
f) processing is necessary for reasons of substantial public interest, on the basis of Union or Member State law which shall be proportionate to the aim pursued, respect the essence of the right to data protection and provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject;

14

# GDPR and Biometric data

g) processing is necessary for the purposes of preventive or occupational medicine, for the assessment of the working capacity of the employee, medical diagnosis, the provision of health or social care or treatment or the management of health or social care systems and services

h) processing is necessary for the purposes of preventive or occupational medicine, for the assessment of the working capacity of the employee, medical diagnosis, the provision of health or social care or treatment or the management of health or social care systems and services

nsoft

15

# GDPR and Biometric data

i) processing is necessary for reasons of public interest in the area of public health, such as protecting against serious cross-border threats;

j) processing is necessary for archiving purposes in the public interest, scientific or historical research purposes

nsoft

16

# Internal Compliance standards

- **WHO** shall use **WHAT KIND** of data of **WHOM** for **WHAT** purpose?

nsoft

17

# Internal Compliance standards

- DPIA (Data Protection Impact Assessment)
- Inform and educate key employees about EU regulation regarding biometric data protection. Discuss about open question and making sure that key employees are aware about importance of compliance with GDPR standards.
- Security measure depends of "the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons." (GDPR Article 32 (1))
- Good cooperation with regulatory authorities;

nsoft

18

# Internal Compliance standards

- Define access to personal data (determine which employee will have access to personal data)
- Internal acts ( General corporate rules, Security breach procedure etc..)
- Inform data subject about their rights;
- Data Protection Agreement

19

# Lex ferenda

- Is it consent protection good enough?
- Can we use another legal ground for betting industry?
- Collecting anonymised data?
- The principles of data protection should therefore not apply to anonymous information, namely information which does not relate to an identified or identifiable natural person or to personal data rendered anonymous in such a manner that the data subject is not or no longer identifiable.

20

20-Million Euros
or 4% Global Turnover

21

Question?

22