

EQUINE TRACEABILITY AND IDENTIFICATION – WHY?

2017 NIAA Equine Forum

Introduction

- Competitor - Hunter/Jumper competitions up to Grand Prix
- Breeder – Showjumping program
- Owner of Silver Creek Farms – Horses competing nationally and internationally
- CEO of Equicore – Equine Big Data Platform specializing in Equine Identification, Traceability, Analytics, and Reporting
- Consultant to the United States Hunter Jumper Association regarding Microchipping, Horse Identification, and IT systems
- Serve on United States Equestrian Federation Horse Identification and Recording Task Force Committee
- Participate in World Horse Identification Recording Data Exchange Commission (WHIRDEC) meetings with foreign countries
- Working relationship with numerous domestic and foreign breed registries and sports federations

Equine Identification & Traceability

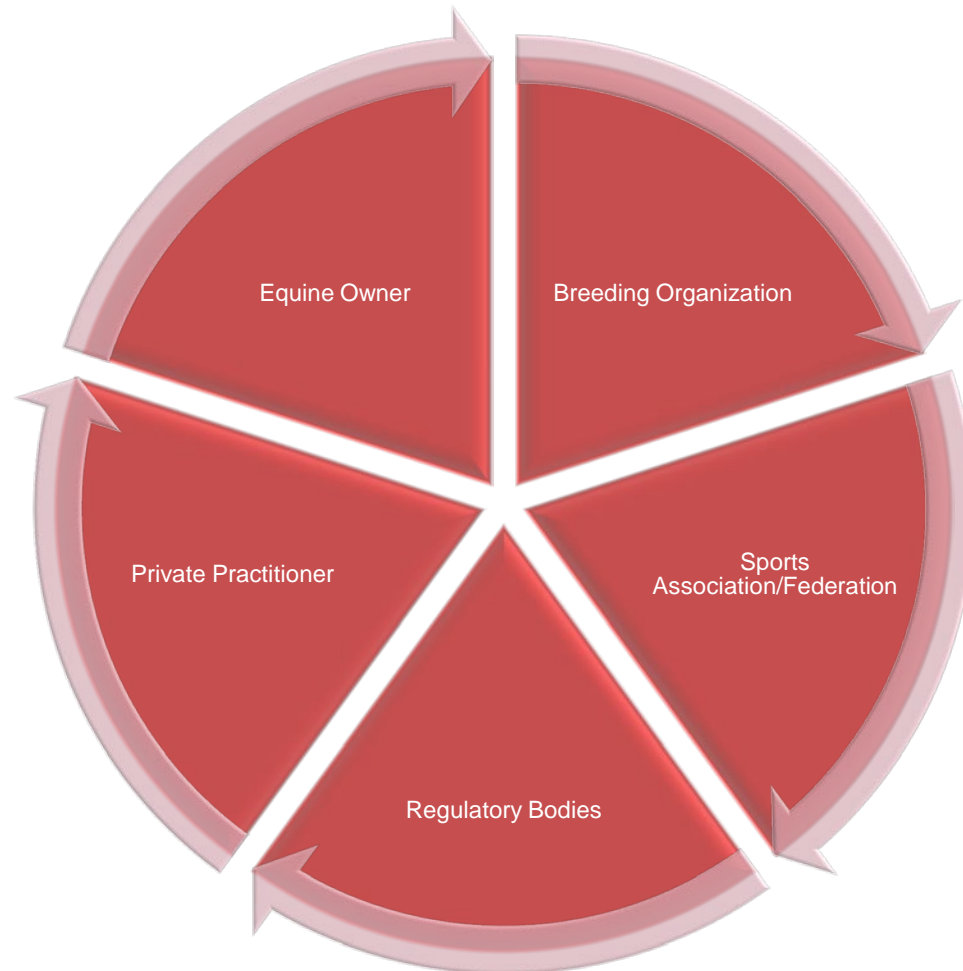
Equine Identification – verifiable evidence of a horse's identity

Equine Traceability – ability to use positive identification to track a horse in all areas of its life from birth to death

Equine identification and traceability are the core fundamentals in every facet of the equine industry.



Equine Identification and Traceability Perspectives



Reasons for Equine Traceability

- Industry Growth
 - Consumer Confidence
 - Transparency
 - Fair Play
- Fraud Prevention
- Biosecurity
- Horse Welfare
- Natural Disaster
- Theft



Components of Equine Traceability



- Registration Document
 - Breed papers
 - Breed passport
 - HID (Horse Identification Document)
 - FEI Passport
- UELN
- Brands/Tattoos
- DNA
- Microchip
- Database/Data Sharing

UELN (Universal Equine Life Number)

Universal Equine Life Numbers are unique identification numbers issued to horses by breed and sports organizations

The Universal Equine Life Number (UELN) system has been agreed upon worldwide between the major horse-breeding and competition organizations. It has been developed through the combined initiative of the following organizations:

- World Breeding Federation for Sport Horses (WBFSH)
- International Stud-Book Committee (ISBC)
- World Arabian Horse Organization (WAHO)
- European Conference of Arabian Horse Organisations (ECAHO)
- Conférence Internationale de l'Anglo-Arabe (CIAA)
- Fédération Equestre Internationale (FEI)
- Union Européenne du Trot (UET)

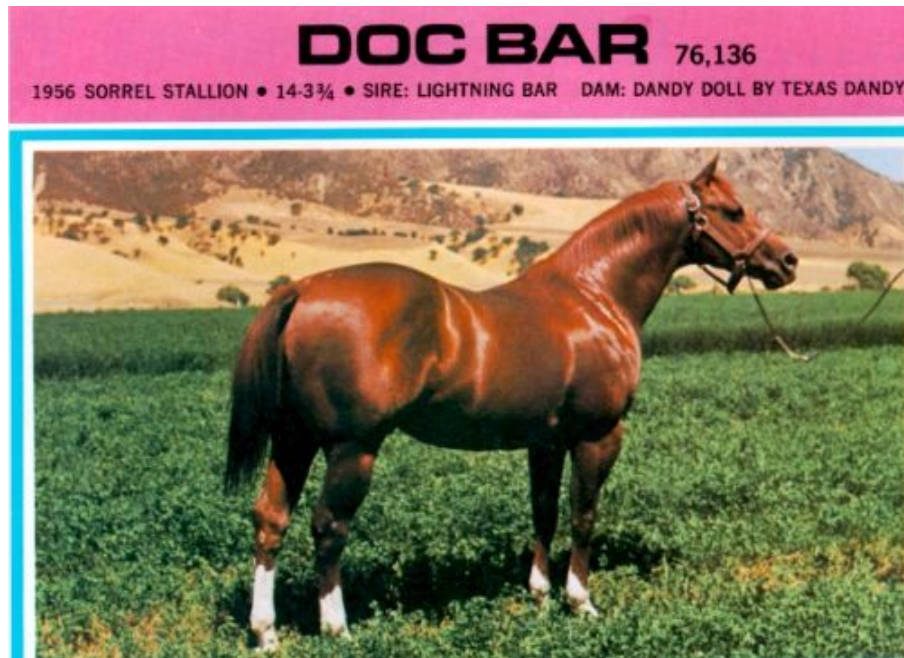
« The UELN system is suitable for the registration of both registered equidae and equidae for breeding and production and allows computerised networks to be brought in gradually to ensure that the animals' identity can continue to be verified »

Source: www.ueln.net

UELN Explained

1. **First three digits** are the code of the country in which the horse was originally registered – ex. USA = 840
1. **Second set of three digits** are the database number of the organization issuing the registration number – ex. AQHA = 006
1. **Final set of remaining 9 digits** are the registration number of the original horse. When the registration number is less than 9 digits, the remaining number of digits are filled with zeros before the registration number to equal 9 digits
1. **Final UELN** = 15 digits displaying the original country of recording, the organization performing the registration, and the unique identification number of the horse

UELN Example



Source: www.aqha.org

Country Code (840)

AQHA Database
(006)

AQHA
Registration
(0076136)

Doc Bar UELN =
84006000076136

UELN Prefix Codes – USA & Canada

Name of the breed	Alphacode	Category	Original country of the breed	Name of organization	UELN Number
Irish Draught	IDH	Draught horse	Ireland	Irish Draught Horse Society of North America	840033
Pure Bred Arab	AR	Pure Bred Arab		PAHR : code for Arabs born in Canada only	124028
Pure Bred Arab	AR	Pure Bred Arab		AHA : code for Arabs born in Mexico only	484004
Pure Bred Arab	AR	Pure Bred Arab		AHA : code for Arabs born in Panama only	591001
Pure Bred Arab	AR	Pure Bred Arab		Arabian Horse Association	840012
Pure Bred Arab	AR	Pure Bred Arab		PAHR : code the Arabs born in USA only	840026
Achal-Tekiner		Saddle horse and pony	Turkmenistan	The Akhal-Teke Horse Registry	840046
American Warmblood Sport Horses and NorthAmerican Sport Ponies	AWR	Saddle horse and pony	USA	AWR : for canadian AWR only	124006
American Warmblood Sport Horses and NorthAmerican Sport Ponies	AWR	Saddle horse and pony	USA	AWR : for Mexican AWR only	484002
American Warmblood Sport Horses and NorthAmerican Sport Ponies	AWR	Saddle horse and pony	USA	American Warmblood Registry	840008
American Warmblood Sport Horses and NorthAmerican Sport Ponies	AWR	Saddle horse and pony	USA	American Warmblood Society	840009
American White and Cream Horse		Saddle horse and pony	USA	American White/American Creme Horse registry	840010
Appaloosa	APPAL	Saddle horse and pony	USA	Appaloosa Horse Club	840011
Barbe	BA	Saddle horse and pony	Maghreb	Horse of the Americas Registry	840045
Buckskin		Saddle horse and pony	USA	American Buckskin Registry association	840001
Buckskin		Saddle horse and pony	USA	International Buckskin Horse Association INC	840014
California Vaquero Horse		Saddle Horse and Pony	USA	California Vaquero Horse Association	840043
Continental Warmblood	CW	Saddle horse and pony	North America	Continental Stud Book	840038
Curly		Saddle horse and pony	USA	International Curly Horse Organization	840035
Fjord	FJ	Saddle horse and pony	Norway	Norwegian Fjord Horse Registry	840029
Friesian Horse	FRI	Saddle horse and pony	Netherlands	Friesian Horse Society Inc	840037
Friesian Sporthorses	FSH	Saddle horse and pony	USA	Friesian Sporthorse Association	840039
Hackney Horse		Saddle horse and pony	UK	American Hackney Horse Society	840002
Hannoveraner	HAN	Saddle horse and pony	Germany	AHS : Code for Hanoverian horse born in Canada only	124030
Hannoveraner	HAN	Saddle horse and pony	Germany	The American Hanoverian Society	840023
Holsteiner Warmblut	HOLST	Saddle horse and pony	Germany	AHHA : Code for holsteiner horses born in Canada only	124029
Holsteiner Warmblut	HOLST	Saddle horse and pony	Germany	AHHA : Code for holsteiner horses born in Mexico only	484005
Holsteiner Warmblut	HOLST	Saddle horse and pony	Germany	American Holsteiner Horse Association Inc	840003
Icelandic	IS	Saddle horse and pony	Iceland	United States Icelandic Horse Congress	840044
ISR Sport Pony		Saddle horse and pony	USA	ISR Pony : Code for Ponies born in Canada only	124026
ISR Sport Pony		Saddle horse and pony	USA	International Sport Horse Registry	840031

Kon. Warmbloed Paardenstamboek Nederland	KWPN	Saddle horse and pony	Netherlands	KWPN - NA : code for horses born in Canada	124007
Kon. Warmbloed Paardenstamboek Nederland	KWPN	Saddle horse and pony	Netherlands	KWPN - NA : code for horses born in Mexico	484003
Kon. Warmbloed Paardenstamboek Nederland	KWPN	Saddle horse and pony	Netherlands	KWPN - NA : code for horses born in USA	840025
KWPN Gelders paard		Saddle horse and pony	Netherlands	KWPN - NA : code for horses born in Canada	124007
KWPN Gelders paard		Saddle horse and pony	Netherlands	KWPN - NA : code for horses born in Mexico	484003
KWPN Gelders paard		Saddle horse and pony	Netherlands	KWPN - NA : code for horses born in USA	840025
Lipizzan	LIP	Saddle horse and pony	Spain	Lipizzan Association of America	840032
Miniature horse		Saddle horse and pony	USA	American Miniature Horse Association	840004
Morgan Horse		Saddle horse and pony	USA	The American Morgan Horse Association	840024
Nokota Horse	NHCO	Saddle horse and pony	USA	Nokota Horse Conservancy	840036
Oldenburger	OLD	Saddle horse and pony	Germany	Oldenburg Registry N.A. : Code for horses born in Canada only	124025
Oldenburger	OLD	Saddle horse and pony	Germany	Oldenburg Horse Breeders Society	840016
Oldenburger	OLD	Saddle horse and pony	Germany	Oldenburg Registry North America	840017
Paint	PAINT	Saddle horse and pony	USA	American Paint Horse Association	840005
Palomino		Saddle horse and pony	USA	Palomino Horse Breeders of America, INC	840018
Paso peruano		Saddle horse and pony	Peru	Peruvian Paso Horse Registry of North America	840019
Pinto		Saddle horse and pony	USA	Pinto Horse Association of America, INC	840020
Pony of the Americas		Saddle horse and pony	USA	Pony of the Americas Club, INC	840021
Quarter Horse	QH	Saddle horse and pony	USA	American Quarter Horse Association	840006
Shagya	SHA	Saddle horse and pony	Hungary	North American Shagya Society	840030
Spanish Mustang		Saddle horse and pony		American Heritage Horse Association	840041
Spanish Mustang		Saddle horse and pony		Spanish Mustang Registry, Inc.	840042
Spanish Mustang		Saddle horse and pony		Horse of the Americas Registry	840045
Swedish Warmblood	SWB	Saddle horse and pony	Sweden	Swedish Warmblood Association of North America	840022
Trakehner	TRAK	Saddle horse and pony	Germany	American Trakehner Association, Inc	840007
Welsh A	WA	Saddle horse and pony	UK	Welsh Pony and Cob Society of America	840028
Welsh B	WB	Saddle horse and pony	UK	Welsh Pony and Cob Society of America	840028
Welsh C		Saddle horse and pony	UK	Welsh Pony and Cob Society of America	840028
Welsh D	WD	Saddle horse and pony	UK	Welsh Pony and Cob Society of America	840028
Thoroughbred	TB	Thoroughbred	UK	The Jockey Club of America (Canadian TB only)	124CAN
Thoroughbred	TB	Thoroughbred	UK	The Jockey Club of America	840USA
Standardbred	TUSA	Trotter	USA	The United States Trotting Association	840027

DNA

- DNA testing is currently used by breed organizations to verify:
 - Parentage
 - Eligibility for inclusion in a studbook
 - Performance traits
 - Genetic disorders
- The DNA testing commonly used (microsatellite) does not provide positive identification of an individual horse, only verification of parentage.
- DNA alone cannot provide positive horse identification to support equine traceability. To provide an efficient level of positive horse identification, DNA must be used in conjunction with a microchip and registration number.

Microchipping

In the past, there were different types of chips being used to identify horses. Individual breeders and some of the National Affiliate Breeds of the USEF used 125kHz microchips with 9-digit numeric or 10-digit alphanumeric for identification.

Now, the international standard of acceptable microchips for identification (FEI, USEF, and foreign organizations) includes the following criteria:

- ISO 11784/11785 compliant
- 15-digit numeric, no letters
- 134.2 kHz

- When first digit of the code is a 9, it is a manufacturer's code identifying which company manufactured the chip
- When the first digit of the code is a number other than 9, is it the country code of the microchip where the animal was chipped
 - USA - 840
 - Germany – 276
 - Belgium - 056

Microchip Manufacturer Codes

981

- Datamars
 - 98102 – Microfindr, Datamars, Bayer resQ, Found Animals, Crystal Tag
 - 98101 - Banfield

956

- Trovan, Ltd. (AKC/CAR)

933

- Microchip ID Equine

977

- AVID

982

- Allflex (2PetWatch)

985

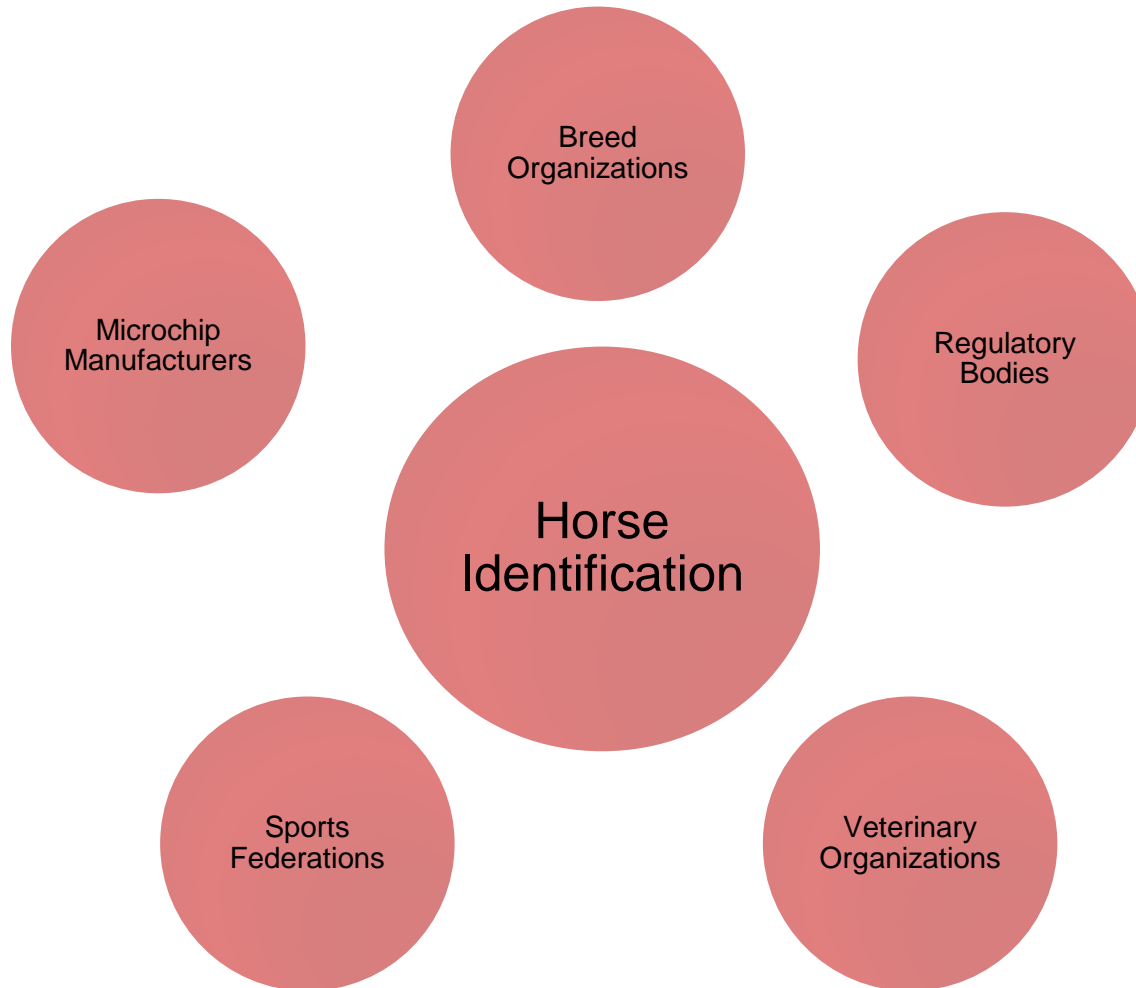
- Destron Fearing/Digital Angel (HomeAgain)

Current Roadblocks to Equine Traceability

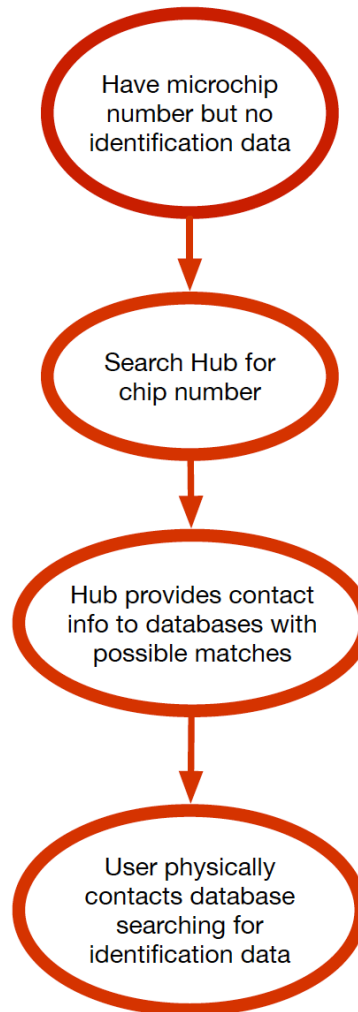
- Lack of identification requirements
- Lack of implementation of central data platform
- Inaccurate data recording
 - *Lack of documentation*
 - *Illegibility*
 - *Limited electronic documentation*
 - *Human error*
- Illegible brands or tattoos
- Lack of use of microchip scanners
- Current structure of data silos



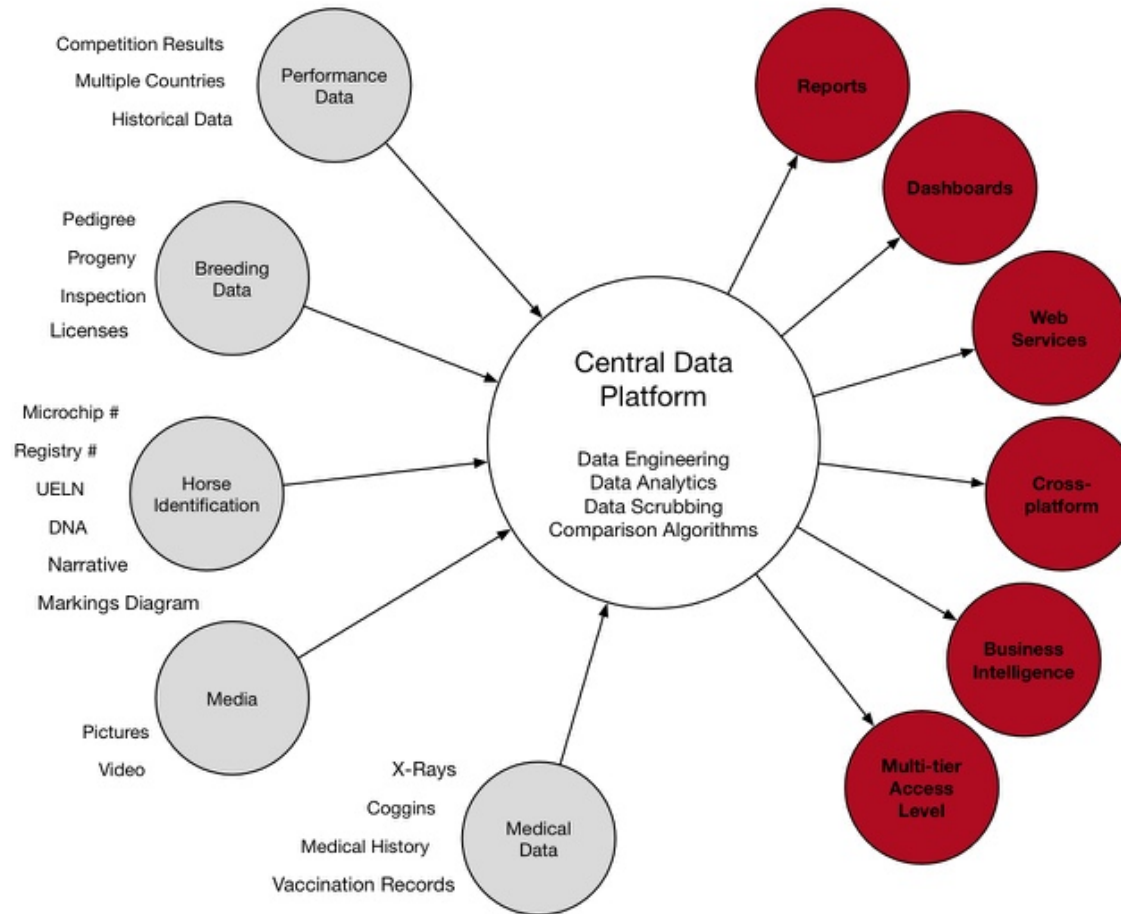
Data Silos in Equine Industry



Current Technology - Microchip Look Up Tool (HUB)



Future of Equine Traceability

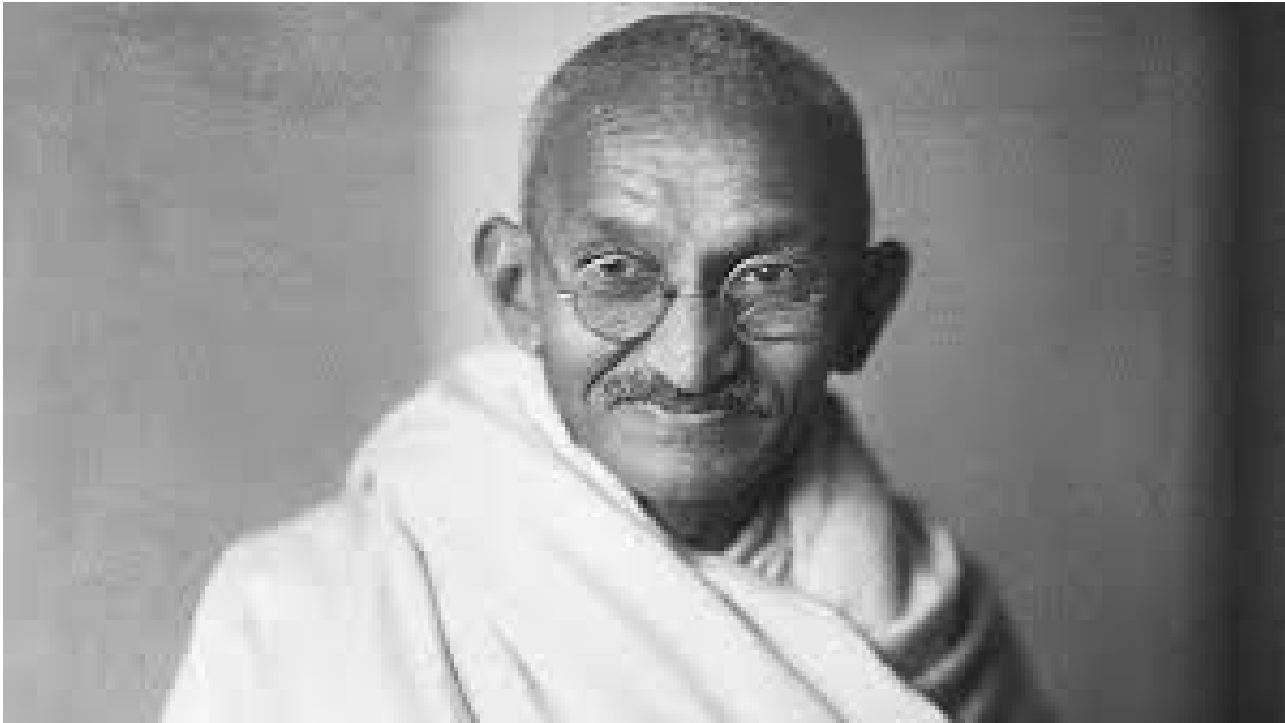


Important Things to Remember

- Ownership of data does not belong to the data platform – it is only the machine used to provide reporting, analytics, and verification
- Equine identification regulations must be easily implemented across the different industry segments in order to be efficient and successful
- International integration is vital due to the frequent global movement of horses
- The future of equine identification and traceability is data aggregation, not excessive data creation
- The welfare of the horse in the process is always first and foremost

Benefits of Equine Identification and Traceability

- Foundation for horse welfare
- Streamlines equine identification for seamless national and international traceability
- Verifies identity and ownership in times of theft or natural disaster
- Provides a higher level of biosecurity and enables faster response time
- Increases consumer confidence
- Supports equine sport integrity
- Promotes growth in the industry from all perspectives



“The greatness of a nation and it’s moral progress can be judged by the way its animals are treated.”

- Mohandas Gandhi

THANK YOU FOR YOUR TIME



EQUICORE