13th International Association for Sport Information World Congress
11-13 March, 2009 - Canberra, Australia

Sprint 2.0 - state-of-the-art ideas for information supply in elite sport and elite sport research.

Dr Hartmut Sandner
Institute for Applied Training Science (IAT)
Leipzig, Germany

Australian Government
Australian Sports Commission

AUSTRALIAN INSTITUTE OF SPORT

13th IASI World Congress

11-13 March, 2009 Canberra, Australia

Building and sustaining sport information communities - through connectivity, collaboration and sharing

HUMAN KINETICS
Routledge Taylor & Francis Group
EPSON EXCEED YOUR VISION
Wolters Kluwer Health | Ovid
Kayell australia Imaging • Graphics • Media
EBSCO HOST

13th IASI World Congress

11-13 March, 2009 Canberra, Australia

Building and sustaining sport information communities - through connectivity, collaboration and sharing

Dr. Hartmut Sandner

Institute for Applied Training Science, Leipzig, Germany

Forschung für den Leistungssport

IAT Institut für Angewandte Trainingswissenschaft

Ein Institut
im Verein IAT/FES des DOSB e.V.

Gefördert durch
Bundesministerium des Innern

„Citius – altius – fortius – better informed“

Sprint 2.0 - state-of-the-art and ideas for information processes in elite sport and elite sport research

sprint sprint 2.0

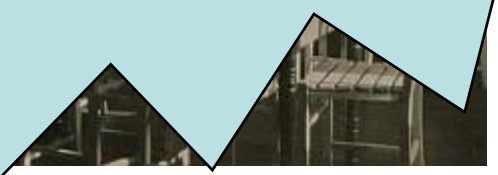
Dr. Hartmut Sandner
Institute for Applied Training Science Leipzig

2005 Beijing
IASI World Congress

- **Wayne Wils n (LA 84 Foun)**

„Will the Interne libr hether the Net will make spo libraries – at leas ne ene

One challenge is to add new, exciting technologies being able to manage information and knowledge in a quite different manner to hundreds of years of library development, traditions and habits – to reinvent libraries or to develop them into information management centres.



Science and elite sport

Several scientific disciplines can contribute

Sport science(s) i. a. with the core field of training science

Life sciences i. a. sports medicine + sport physiology

Technical sciences / Engineering i. a. biomechanics + computer Science

Social sciences i. a. sport psychology + sport sociology

Time budget for retrieval, supply and processing of quality information, latest findings and knowledge?

Implementation of scientific findings with distinct sport specifics

The development of all scientific disciplines as well as of international elite sport is very dynamic

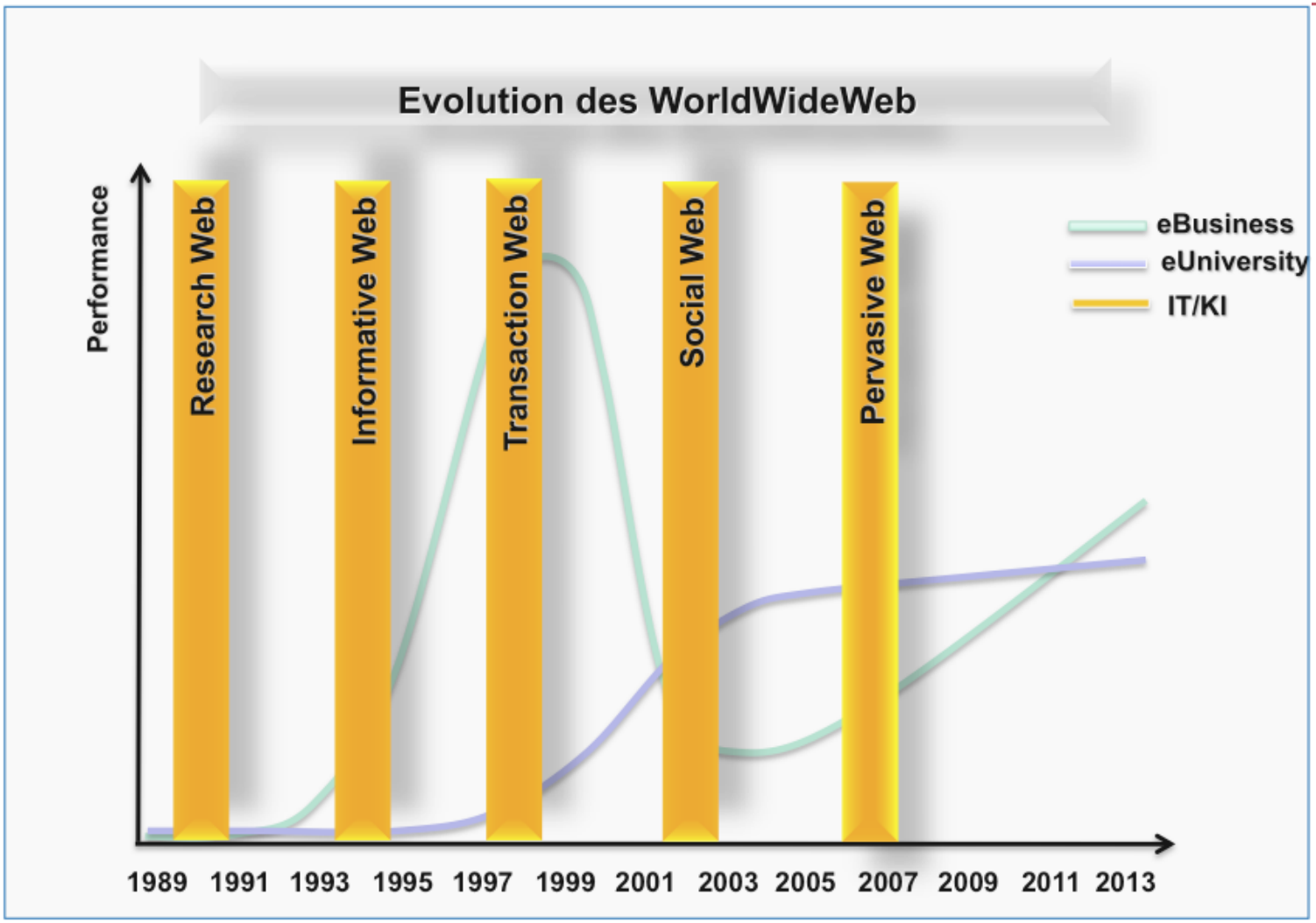
Recent situation in elite sport

Selected ways of access to quality information and knowledge in elite sport

- libraries (DSHS Cologne, universities, IAT) with books,
- journals, conference proceedings…
- databases (IAT, BISp, Ebsco, Medline…)
- videos, TV
- live observation of training sessions and competitions
- individual and organisational training analyses
- personal contacts, communication with colleagues
- participation in congresses and workshops

often decentralised access with differing media, differing places, differing rules of access, free of charge or connected with additional costs…

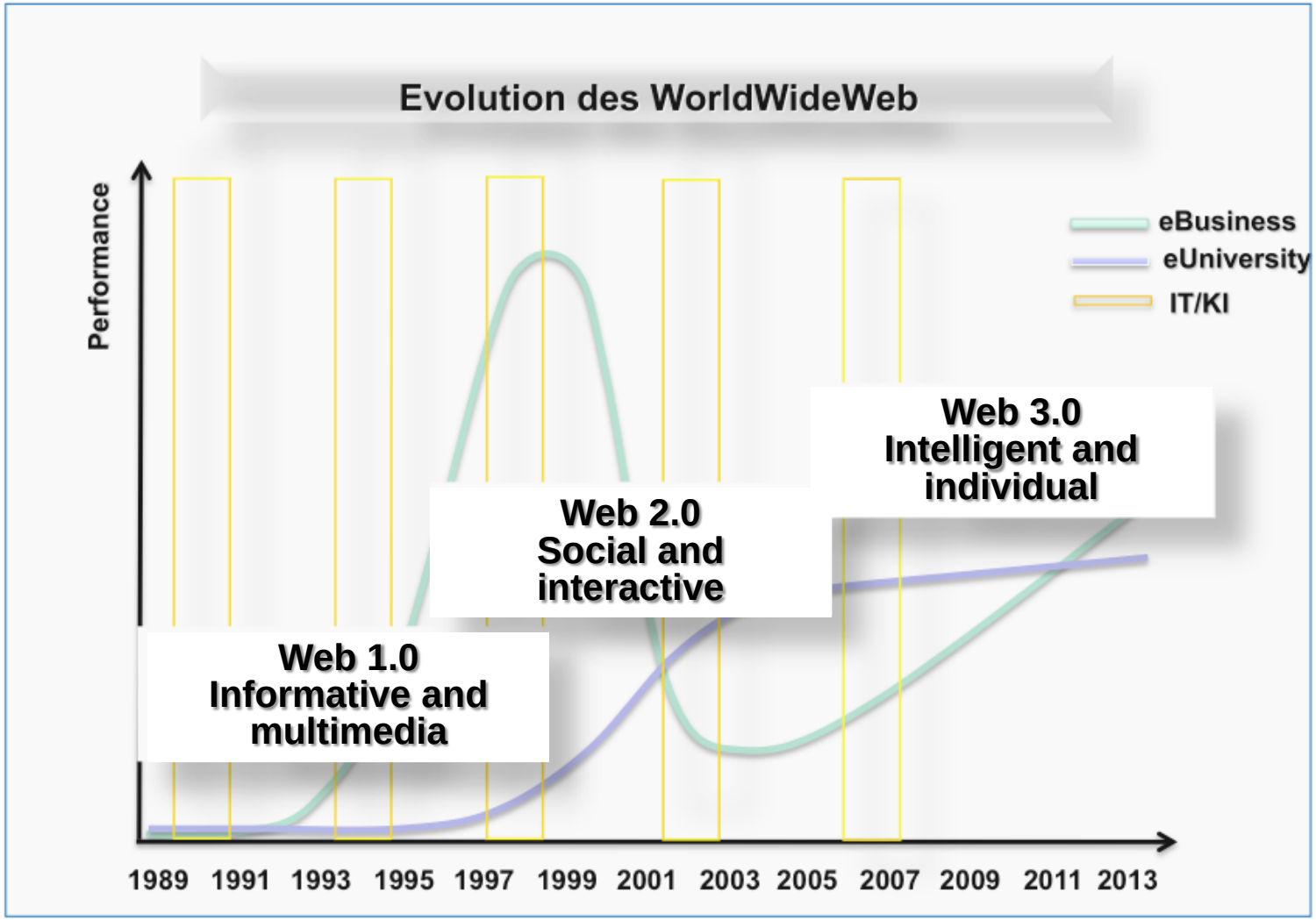
Evolution of the WorldWideWeb



(Kerres, 2006; Kerres & Nattland, 2006; Milius, 2006)

Source: Igel (2008). Infdormationsverhalten von Sportwissenschaftlern

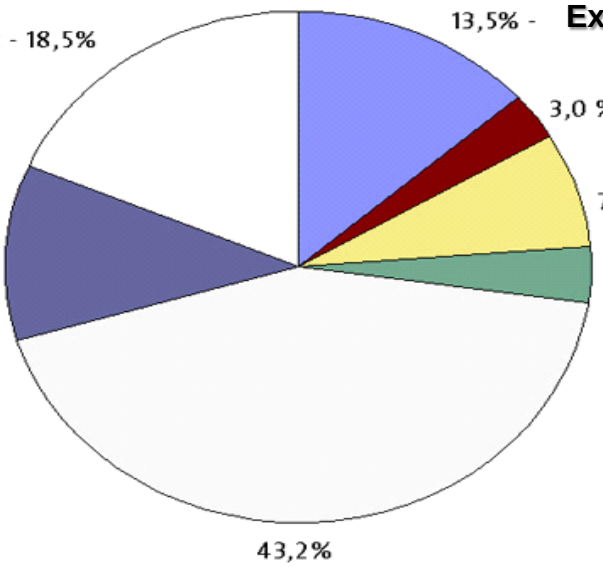
Evolution of the WorldWide Web



(Kerres, 2006; Kerres & Nattland, 2006; Milius, 2006)

Source: Igel (2008). Infdormationsverhalten von Sportwissenschaftlern

Distribution of working load in elite coaching settings



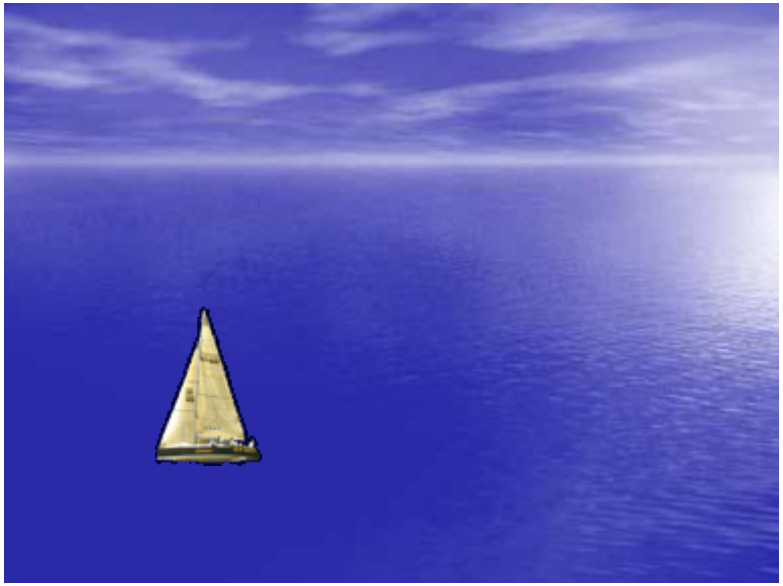
only 25 % for information retrieval, acquisition and exchange

Source: Muckenhaupt (2008). Information supply for coaches

Recent situation – Information over-flow – the example of the Internet

- **In 2006 Google indexed more than 25 Billions of free-access websites.**
- **The so called Deep Web is estimated to be approx. 500 times bigger [2005]**
- **In July 2008 Google had discovered one trillion unique URLs.**

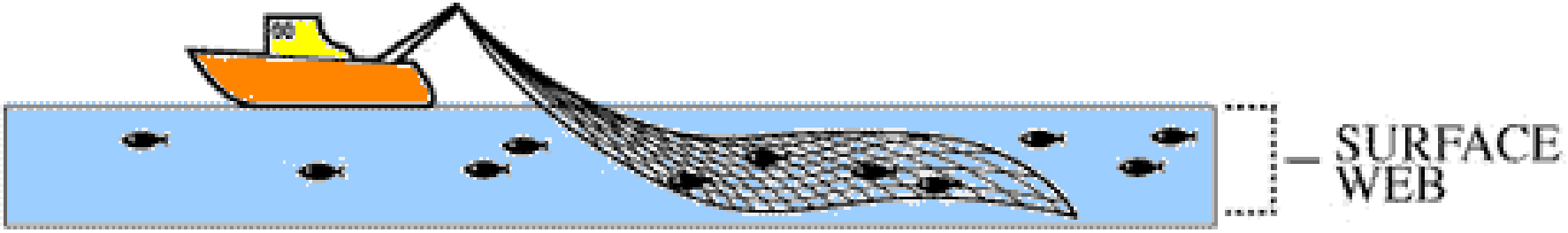
Medium	Terabyte
Surface Web	167
Deep Web	91.850
Emails	440.606
Instant Messaging	274
total	532.897



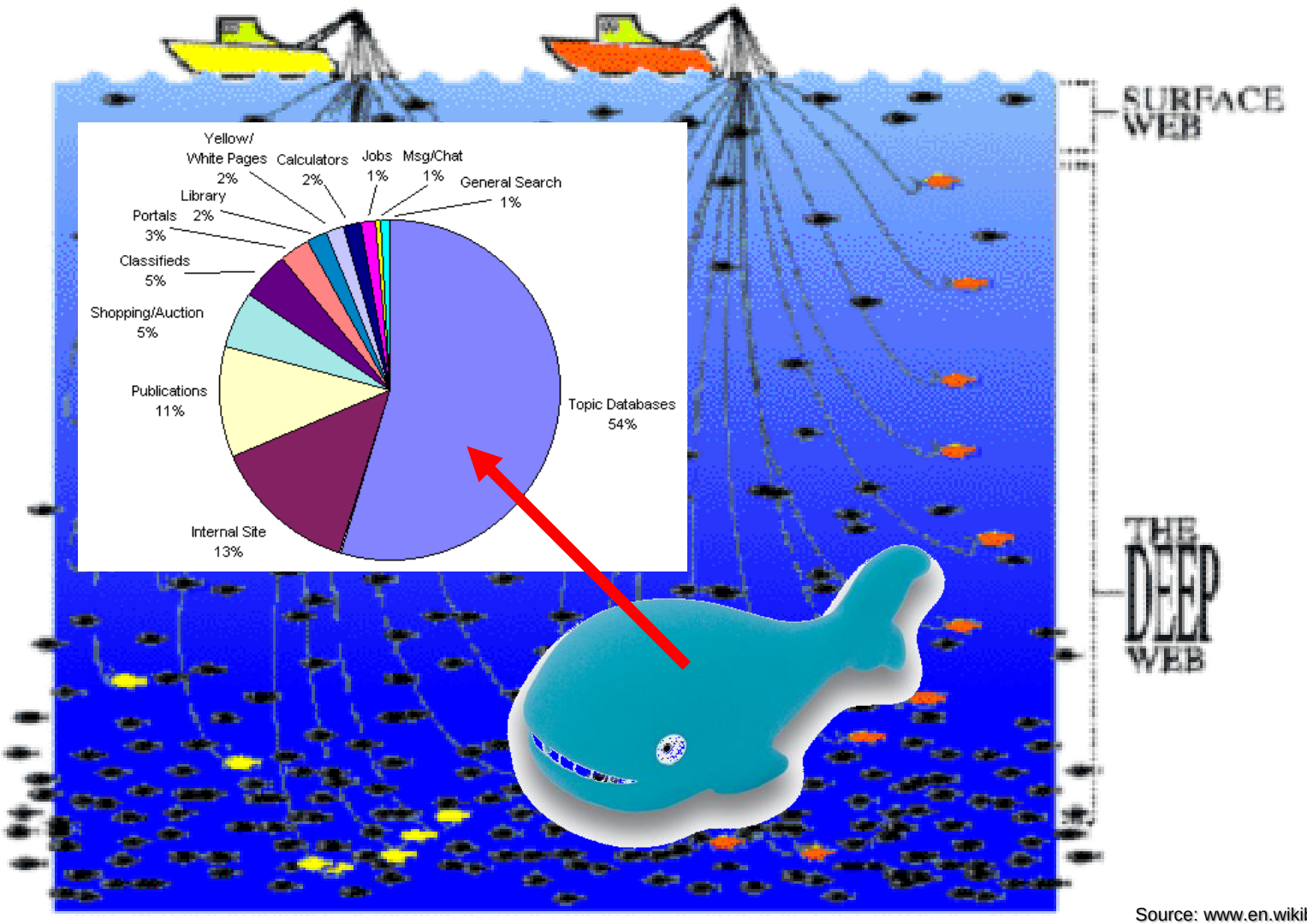
Dimensions of the Internet (2002)

Source: How much information 2003

Surface Web – The Google-World



Deep Web



Source: www.en.wikibooks.org

Source:White Paper @ http://www.brightplanet.com/deepcontent/tutorials/DeepWeb/index.asp

Examples for recent solutions

- **topical bunching of information offers**
- **active information supply and distribution**
- **individualised information supply**
- **design and development of information networks (organisations, institutions, persons)**

Virtual library Sport

ViFa:SPORT

ning information services

the roof of a

top-shop

rman Sport University Cologne

t. Appl. Training Science Leipzig

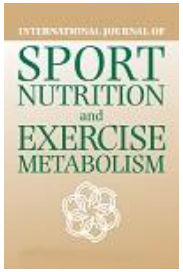
d. Inst. Sport Science Bonn

s Hamburg

Ebert-Foundation Bonn

Training scientific information service SPONET - SPRINT

IAT Institut für Angewandte Trainingswissenschaft



conference proceedings

more than 100 journals

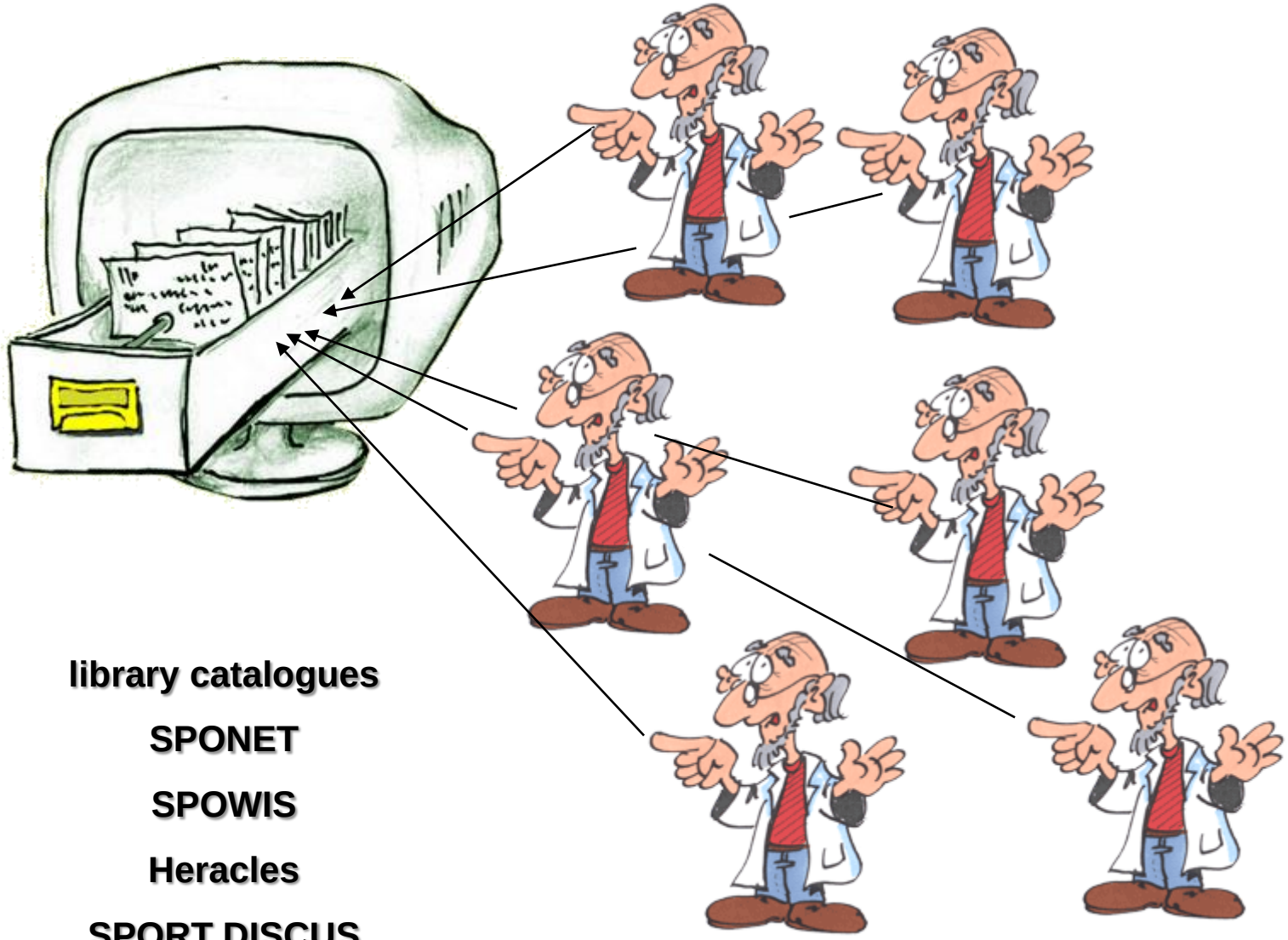
active distribution of specialised information services based on individualised information profiles

latest books of 200 publishing houses

(inter)national databases

A service of the National Library of Medicine and the National Institutes of Health

Information delivery in academic environments



library catalogues

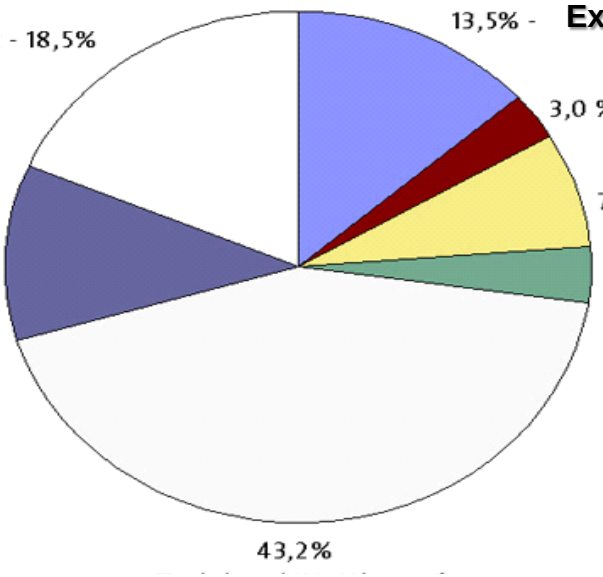
SPONET

SPOWIS

Heracles

SPORT DISCUS

Distribution of working load in elite coaching settings



only 25 % for information retrieval, acquisition and exchange

Source: Muckenhaupt (2008). Information supply for coaches

Active information supply by SPRINT for coaches

Institut für Angewandte Trainingswissenschaft

Marschnerstraße 29
04109 Leipzig
Tel: +49 (341) 4945 01
Fax: +49 (341) 4945 400
www.sport-iat.de

Hallo Dr. Hartmut Sandner,

Ihr personalisierter Suchagent für die Neuerfassungen in den IAT-Publikationsdatenbanken hat folgende Ergebnisse für Sie:

- 1 Treffer für Profil Kampfsport / SPONET (täglich)
- 4 Treffer für Profil komplett / SPORTBOX (täglich)
- 3 Treffer für Profil SPONET komplett / SPONET5 (täglich)

Die Ergebnisse nach Anfrageprofilen geordnet:

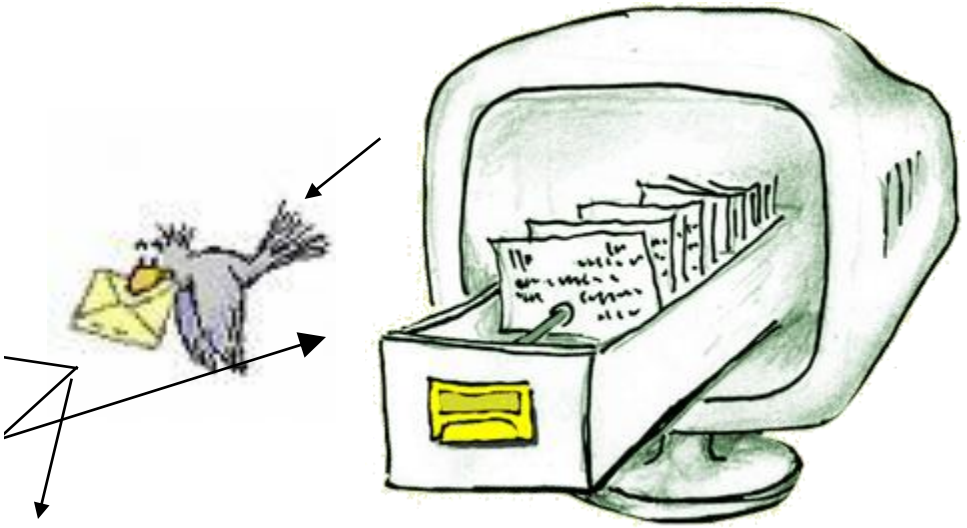
- **Profil 'Kampfsport' - Datenbank SPONET**

  1. Ulkar, B. & Kunduracioglu, B. (2008). Evaluation of the knee laxities of wrestlers (Untersuchung von Knie-Instabilitäten bei Ringern). *Biol. Sport*, 25 (4), 361-369.(Mikrofiche-Nummer: 305560)

- **Profil 'komplett' - Datenbank SPORTBOX**

  1. Danckert, P. & Schück, H. (2009). Kraftmaschine Parlament. Aachen: Meyer & Meyer.

     Der Rechtsanwalt und Vorsitzende des Sportausschusses des Deutschen Bundestags schreibt "klar, kantig und überzeugend" über die Geschichte de Sportförderung in der Bundesrepublik Deutschland - mit den Anfängen der Sportdebatten im Plenum des Deutschen Bundestags 1967 bis hin zu einer Vision und sportpolitischen Zielstellungen für die kommenden Legislaturperioden. Des Weiteren wird in einem Kapitel das Verhältnis zwischen den unabhängigen Institutionen und Organisationen des Sports und der staatlichen Förderung wird sehr klar und deutlich gezeichnet. In diesem Zusammenhang wird auch ganz deutlich die Arbeit des Sportausschusses des Deutschen Bundestags beleuchtet. Damit das Verhältnis Staat-Sport so funktioniert, wurden schon 1978 drei Eckpfeiler festgeschrieben, die heute noch als das staatliche Bekenntnis zu Daseinsvorsorge gelten: 1) die Autonomie des Sports 2) die Subsidiarität der Sportförderung 3) ein partnerschaftliches Zusammenwirken Natürlich darf auch eine klare Betrachtung des Themas Doping nicht fehlen. Schon 1977 wurde sich in einem "öffentlichen Dopinghearing" offensiv mit der Thematik auseinandergesetzt, damals jedoch "verhinderte ein falsches



library catalogues

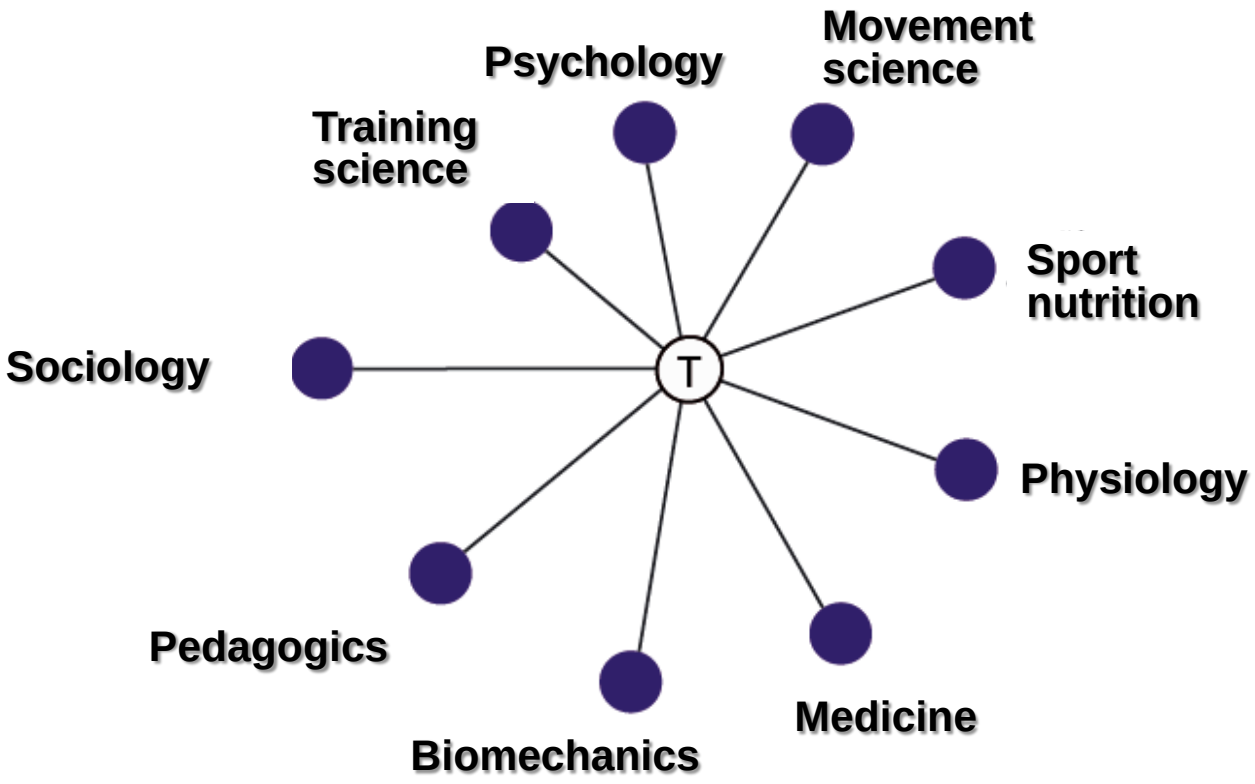
SPONET

SPOWIS

Heracles

SPORT DISCUS

Elite coaches' topics of major interest



Source: Muckenhaupt (2008). Information supply for coaches

Representation of major topics in SPONET / SPRINT

IAT Institut für Angewandte Trainingswissenschaft

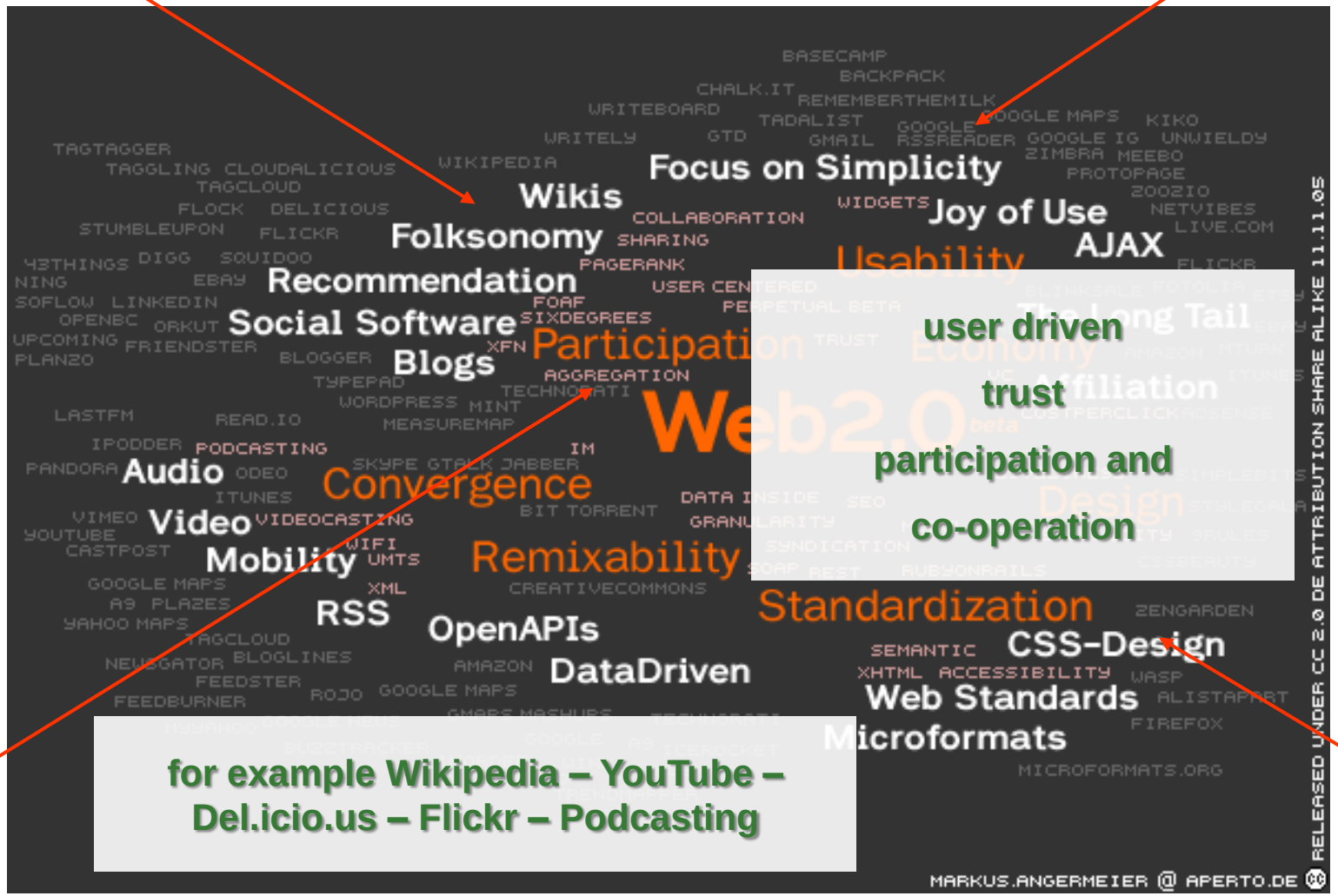
- actual information - 288
- academic training and research – 279
- endurance sports – 4787
- sports for handicapped people - 107
- biological and medical sciences - 7711
- spare-time sport - 11
- combat sport – 628
- strength and power sports- 1267
- management and organisation - 255
- junior elite sport - 1097
- natural science and technology - 1936
- organisations and events - 724
- sport at schools - 46
- social sciences - 927
- team sports - 2446
- sport history and sport politics - 372
- sport facilities and apparatuses - 127
- technical sports - 1038
- training science - 3428

- **adapted to and controlled by the individual information need of sport / training scientists and coaches**
- **service can be accessed without temporal and local restrictions and has options for interactions**
- **serves the professional and individual further education**
- **is characterised by actuality and professional competence**
- **the services can be used parallel to other activities**

SPRINT 2.0

IAT Institut für Angewandte Trainingswissenschaft

A training scientific information and documentation network in elite sport

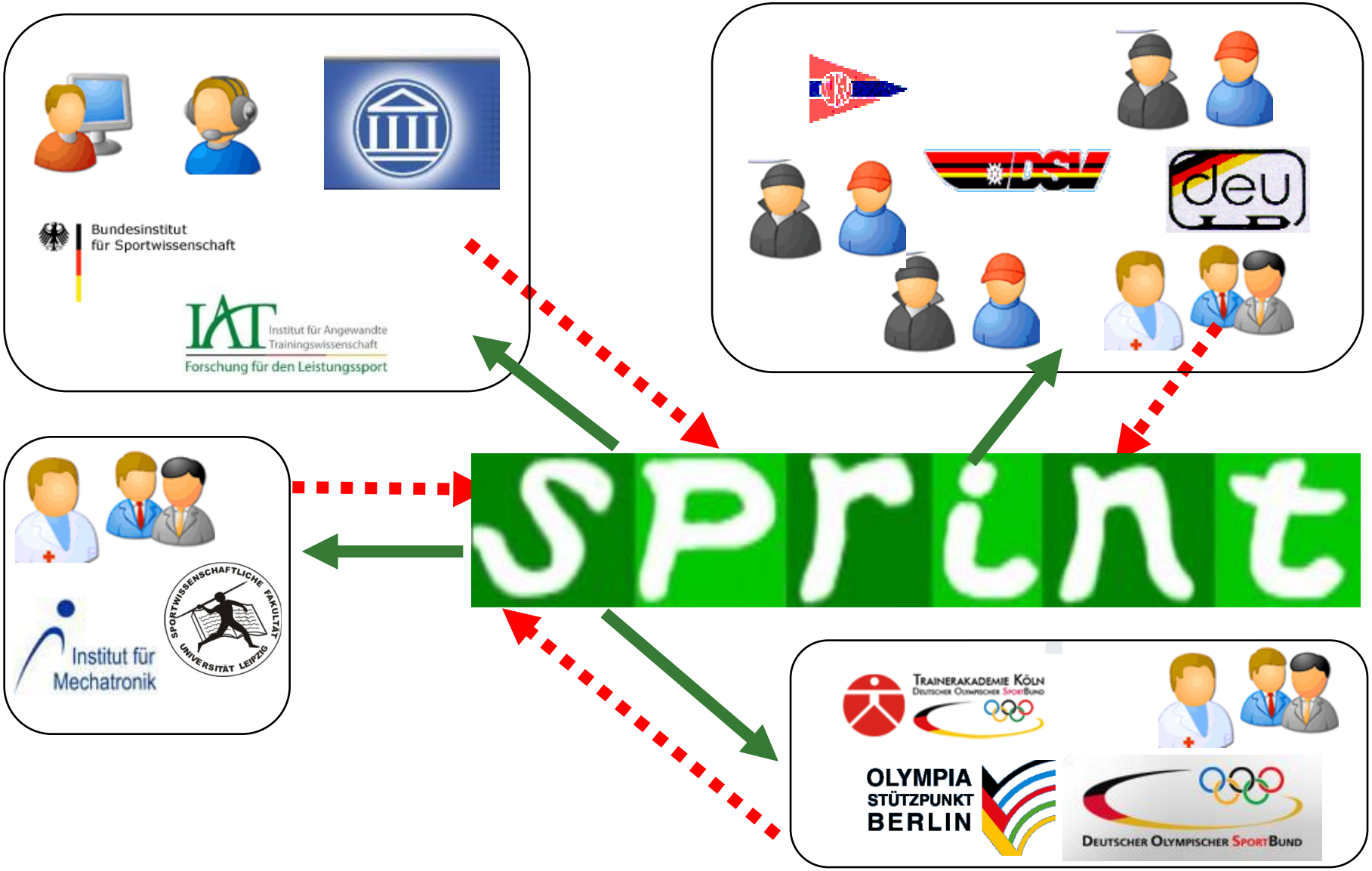


Basic approach for SPRINT 2.0

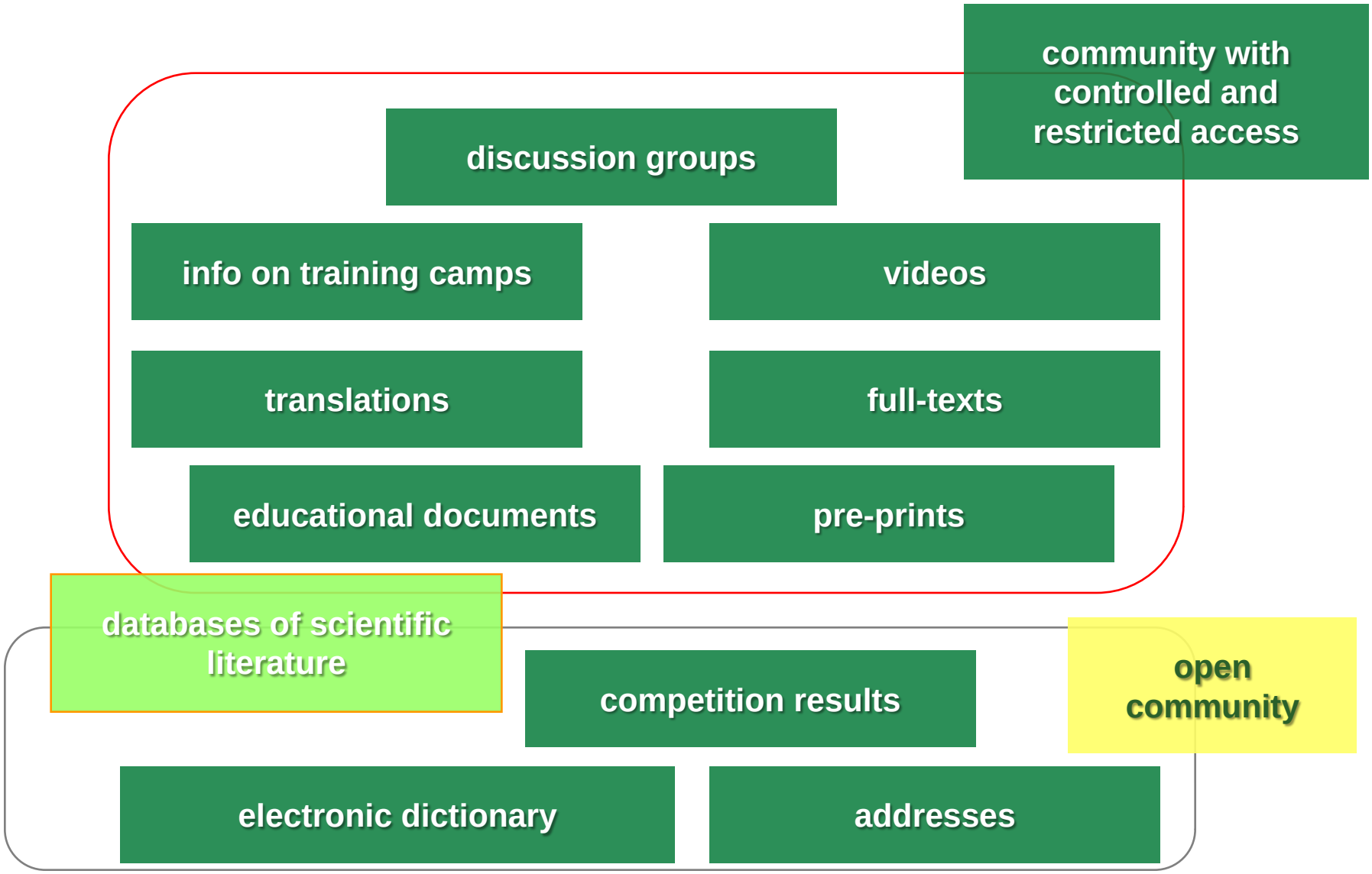
Participation of many partners, information and knowledge supply by many partners, use and application by many partners

	ways of I + K supply and distribution	document types	assembling of I + K (initiated by)	description of the content of I + K
traditional	via I/D-institutions	Print media selected fulltexts Internetmedia videos	German Sport Uni., Inst. Appl. Training Sci., Fed. Inst. Sport Sci.	German Sport Uni., Inst. Appl. Training Sci., Fed. Inst. Sport Sci.
new	via I/D-institutions, but also direct links between users/partners	printmedia fulltexts Internetmedia videos diskussion forums blogs wikis	German Sport Uni., Inst. Appl. Training Sci., Fed. Inst. Sport Sci. + all users / partners	German Sport Uni., Inst. Appl. Training Sci., Fed. Inst. Sport Sci. etc. + all users / partners (co-operative approach)

Information supply and information application

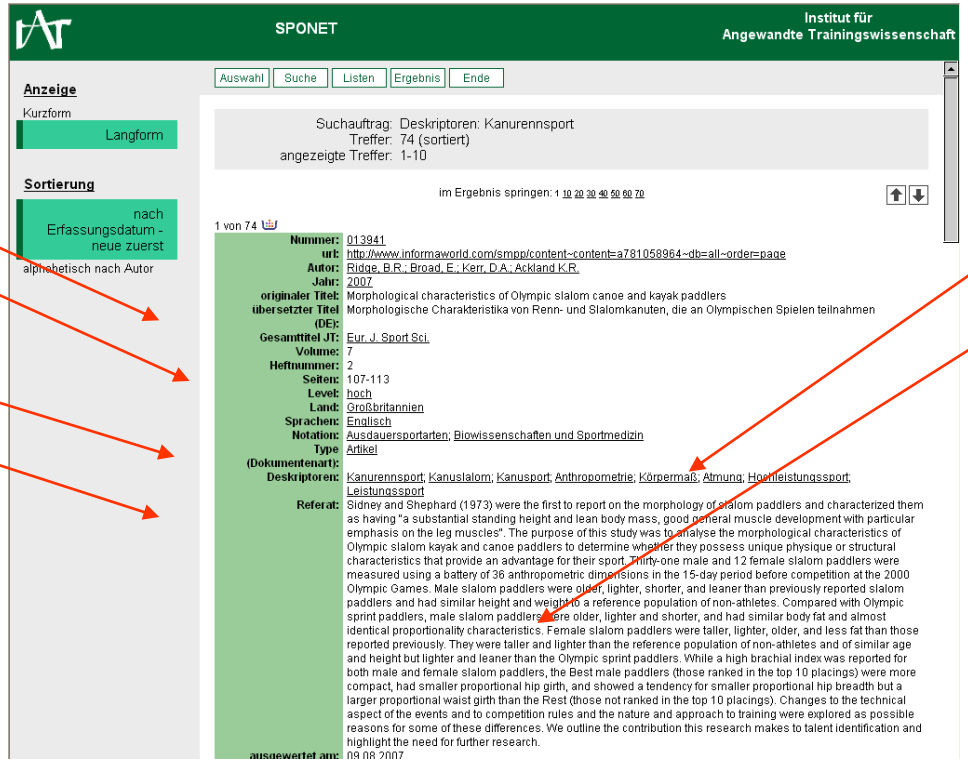


Examples for co-operative SPRINT - services



Participation and Folksonomy

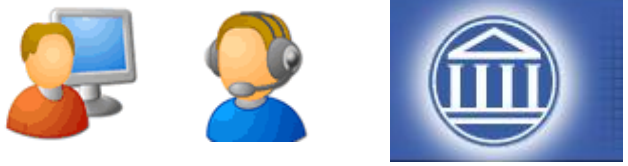
„Web 2.0“ describes a changed recognition, understanding and application of the Web, mainly from the organisational point of view: Contend is not any longer provided centrally by big „media“ (institutions), the so called „fourth power“, only and supplied res. distributed to the mass audience, but also by independend persons who are inter-connected, the so called „fifth power“… Besides the traditional strict distinction between the role of a processor res. provider of information on the one side and the pure consumer of information on the other side services and offers can be found res. appear with partial or temporal reversal of the roles.



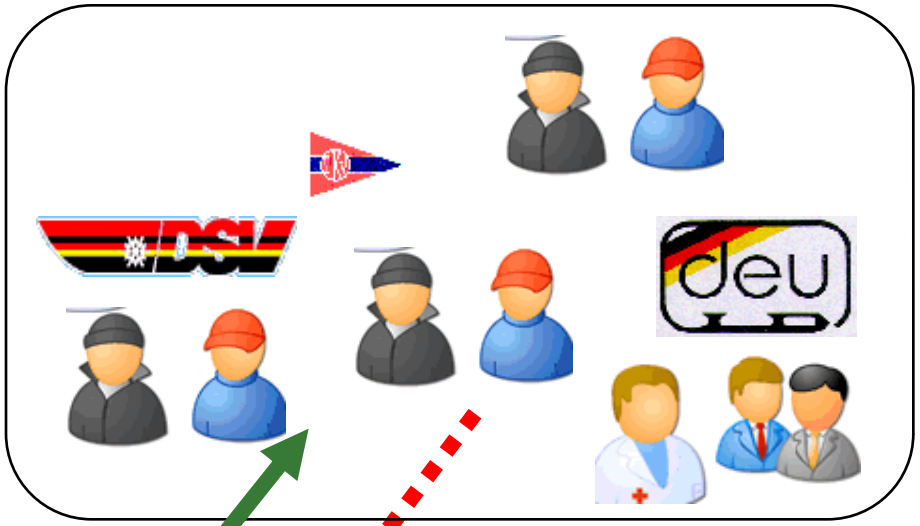
tagging
www.del.icio.us

adding comments -
discussing -
translating

Institut für Angewandte Trainingswissenschaft



Institut für Angewandte Trainingswissenschaft
Forschung für den Leistungssport



Institut für Mechatronik

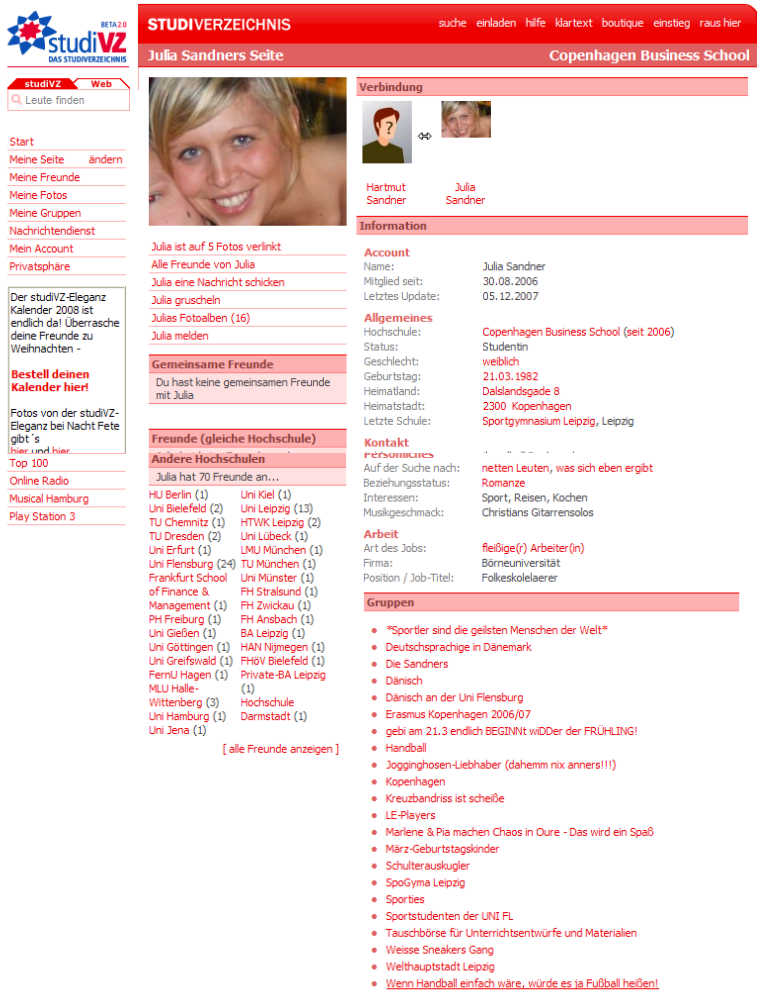
Sportwissenschaftliche Fakultät Universität Leipzig

Bundesinstitut für Sportwissenschaft

sprint WIKI

SPRINTWIKI as a vertical portal for elite sport training

Secured discussion groups – example www.studivz.de



Friends / partners by individual invitation

Photo- and/or video folders

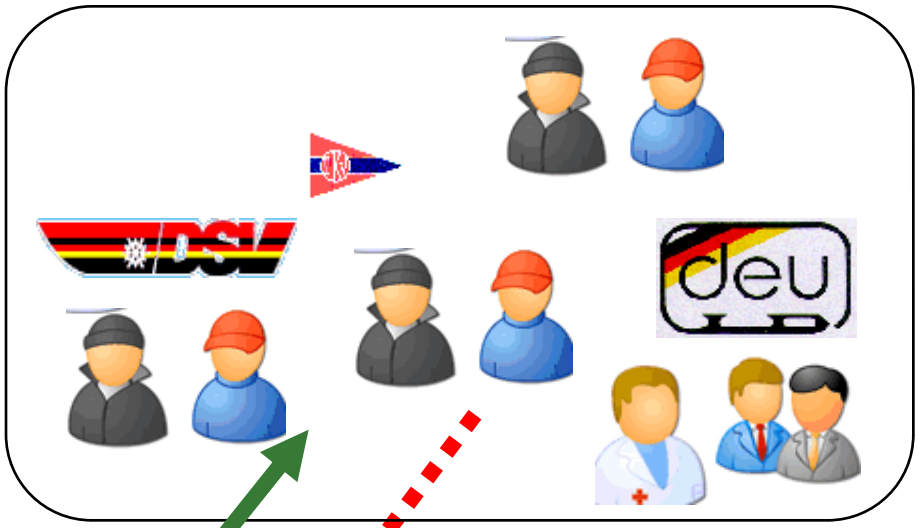
Personal contact info as well as info on fields of interest

Info on institutions and persons of your individual network which can be contacted

List of discussion group you are member of and you have access to

General news service for individually selected topics

Source: www.studivz.de

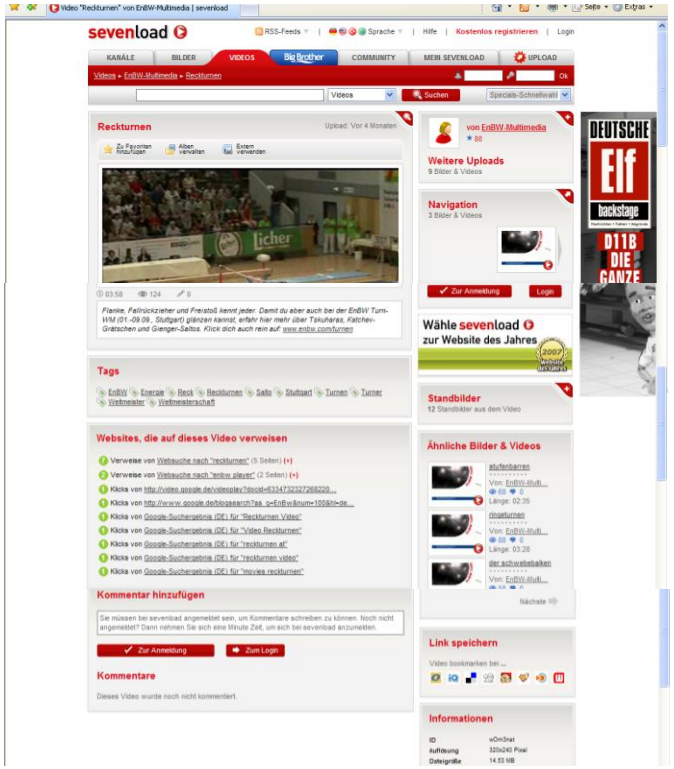


sprint GROUP

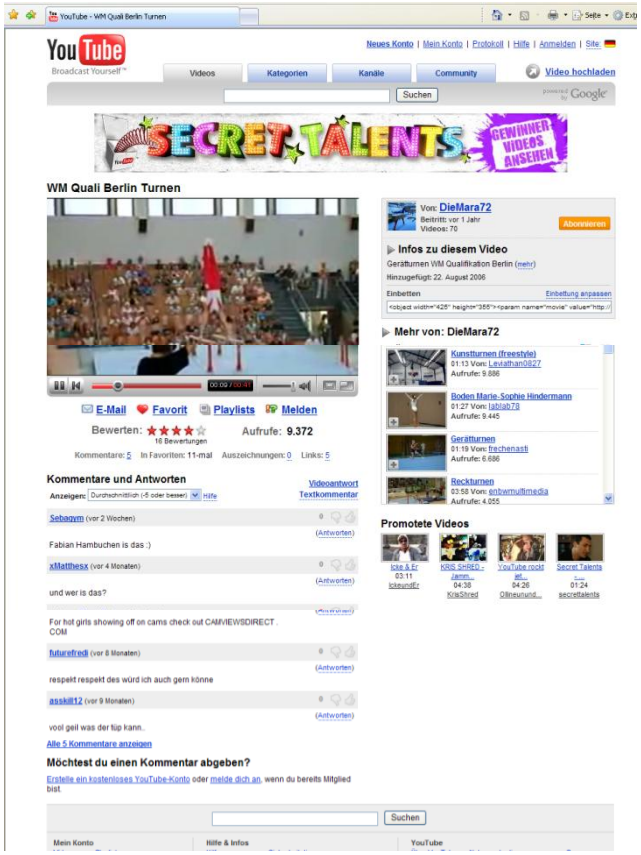
Video database in elite sport – Sevenload, YouTube

Institut für Angewandte Trainingswissenschaft

sevenload



You Tube



Searching and browsing options

Videoplayer

Photos and other documents

Comments

Sources: www.sevenload.de & www.youtube.de

Video database in elite sport – SPIDAR (AIS Canberra)

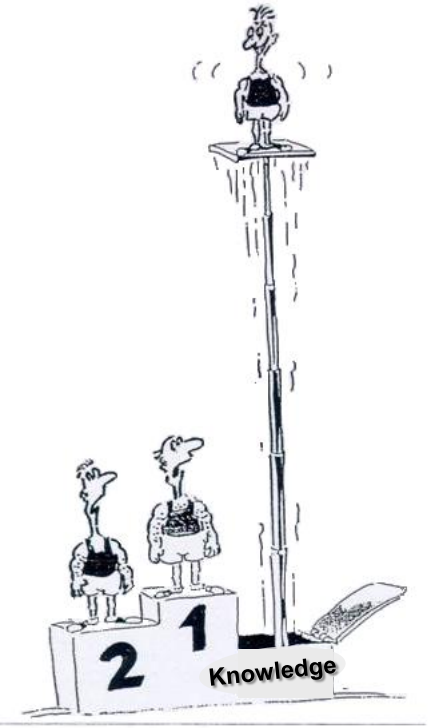
IAT Institut für Angewandte Trainingswissenschaft

rmation & Digital Asset Repository

coaching activity is often supported by video and other digital technologies to better understand, measure, and improve athletic performance in training, competition and research

io recordings
Photographic images
Statistical & notational data
X-rays & medical scans
Animation & graphics
Proprietary performance analysis software files

Source: G. Reynolds: SPIDAR (2007)



Better informed!

but

citius – altius - fortius ?

Thank you for your attention!

Institute for Applied Training Science (IAT)
Marschnerstraße 29, 04109 Leipzig, Germany

Dr. Hartmut Sandner
Fachbereichsleiter IKS
E-mail: sandner@iat.uni-leipzig.de
Phone: + 49 341 4945 - 133
Fax: + 49 341 4945 - 400

Ein Institut
im Verein IAT/FES des DOSB e.V.

Gefördert durch
Bundesministerium des Innern