

Making Sense of Visual Content

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- These engines do a good job of searching for **online images**
 - Google
 - AllTheWeb
 - Both **rely on text** (filename, nearby text, meta-tags)

- Our difference : focus is **not web search**, technology is not text-based but **content analysis of images**

- Market segments in which visual data has a *critical value* :
 - Corporations
 - Media Companies
 - Public & Government
 - Software vendors (Media Asset Management, Security)
 - System integrators

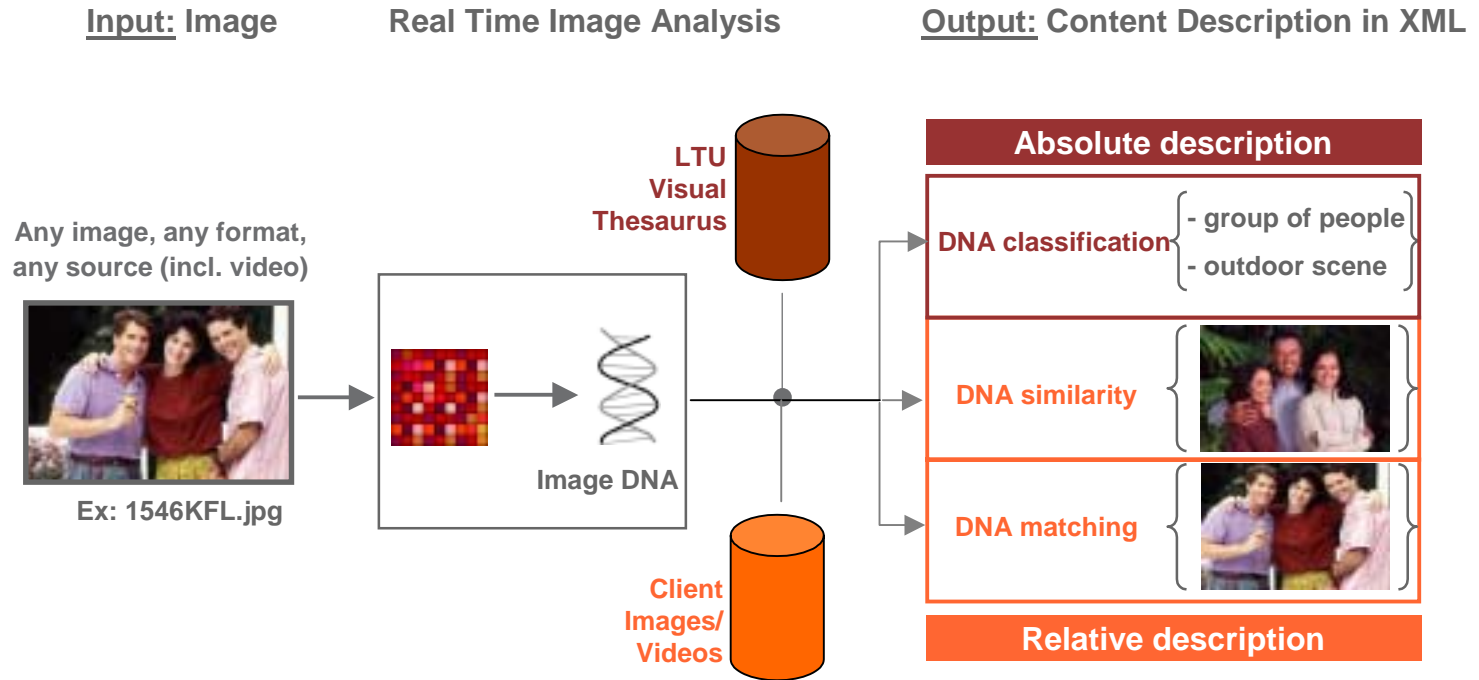



-Very high level (unrelated to image): « *Mad cow disease hit Europe in 1996* »

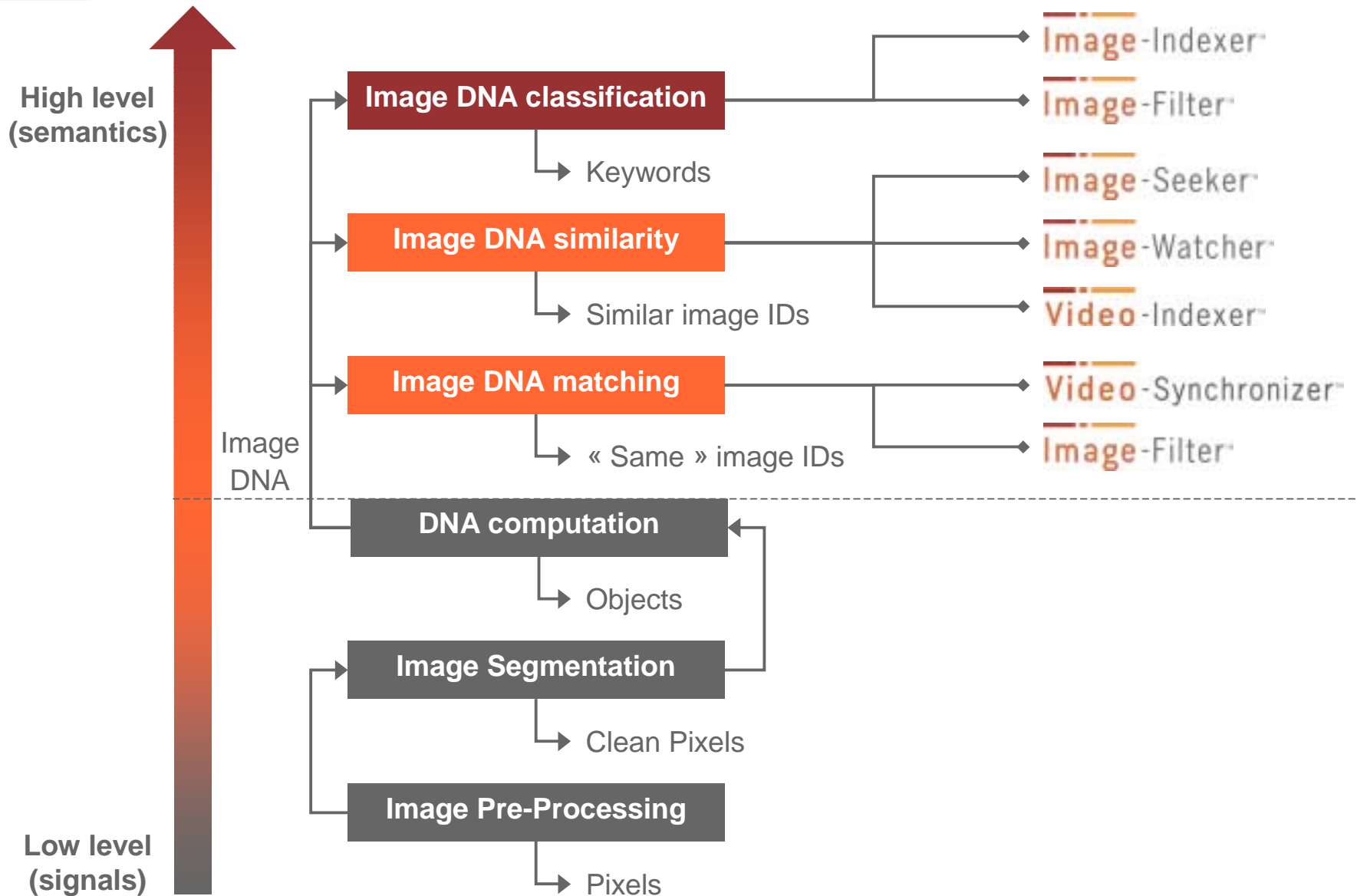
-High level: « *cows, field, sky* »

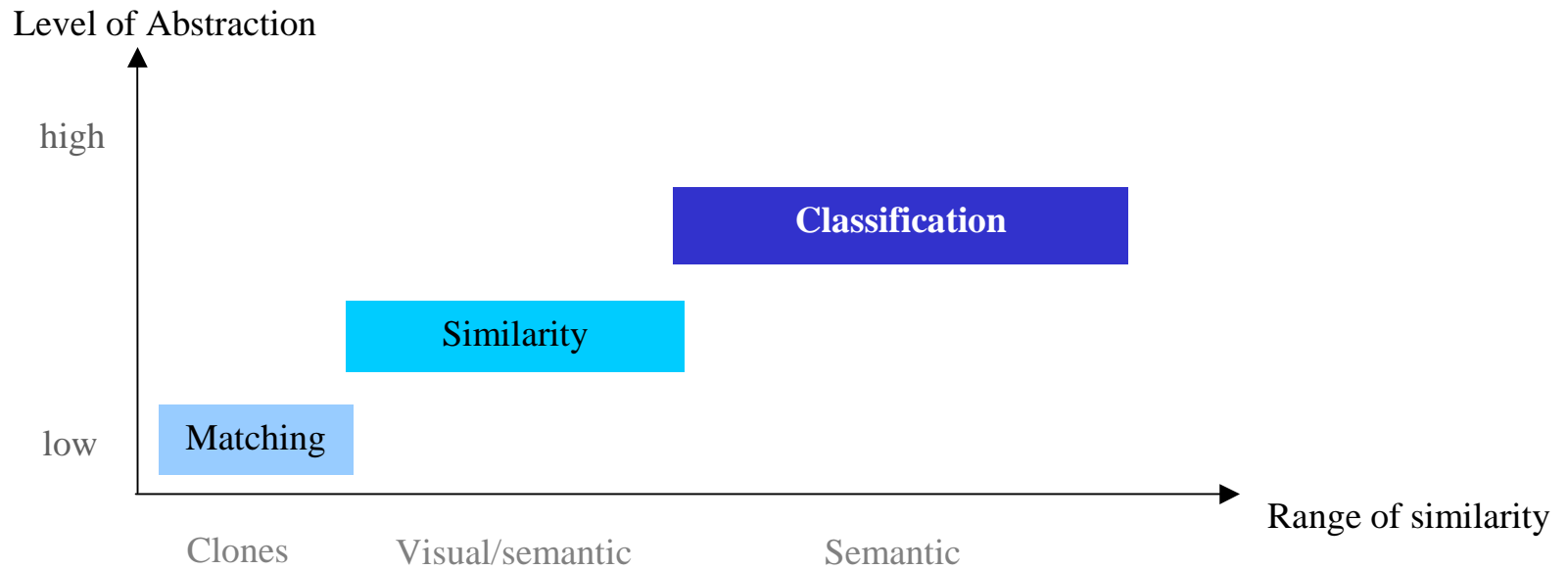
-Low level: « *brown (central zones), green (peripheral zones), blue (upper zone)* »

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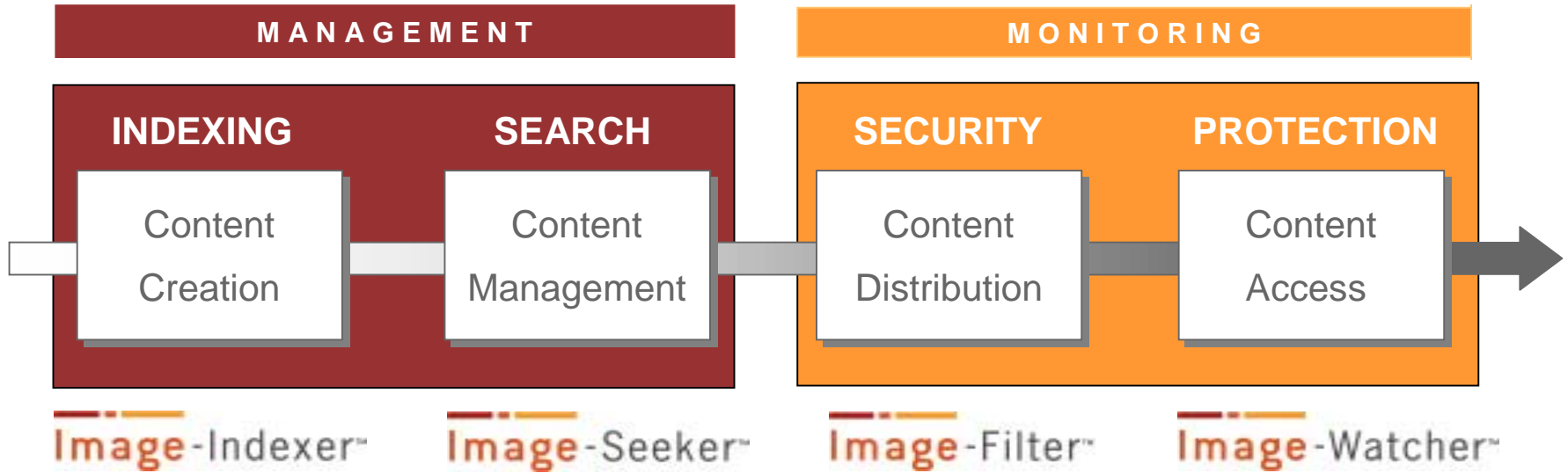


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 Golden Award for General Technology, Nov 2001
- The European IST Prize**, The European Council of Applied Sciences & Engineering, Dec 2001

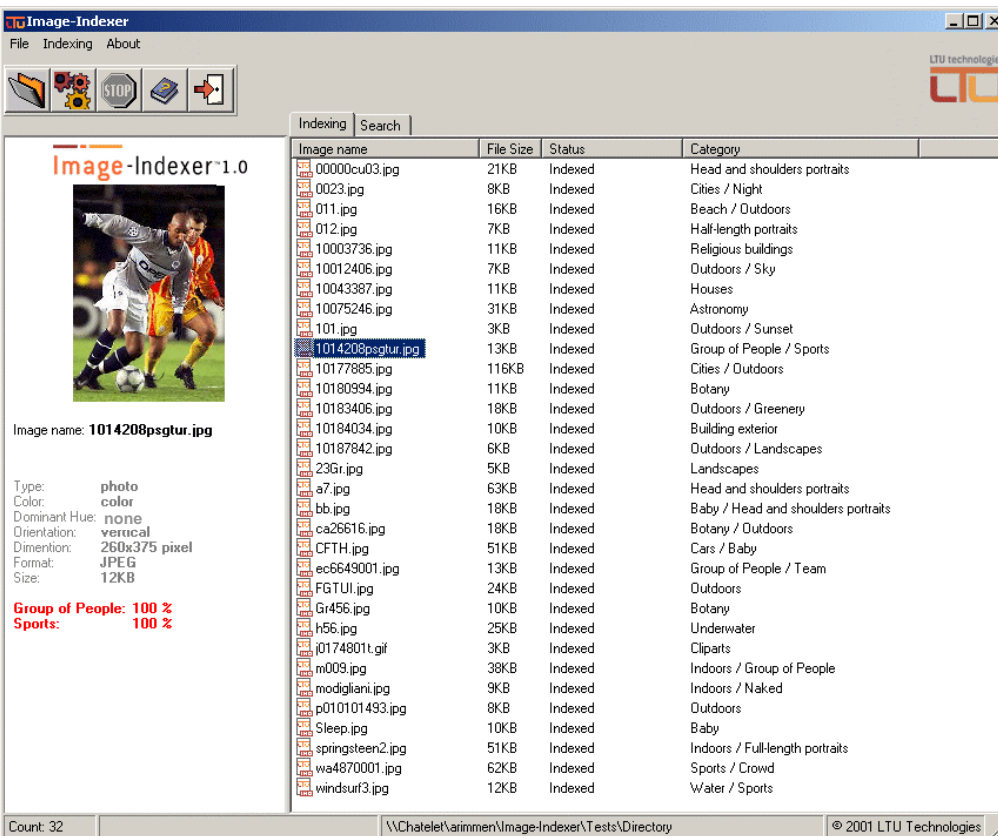




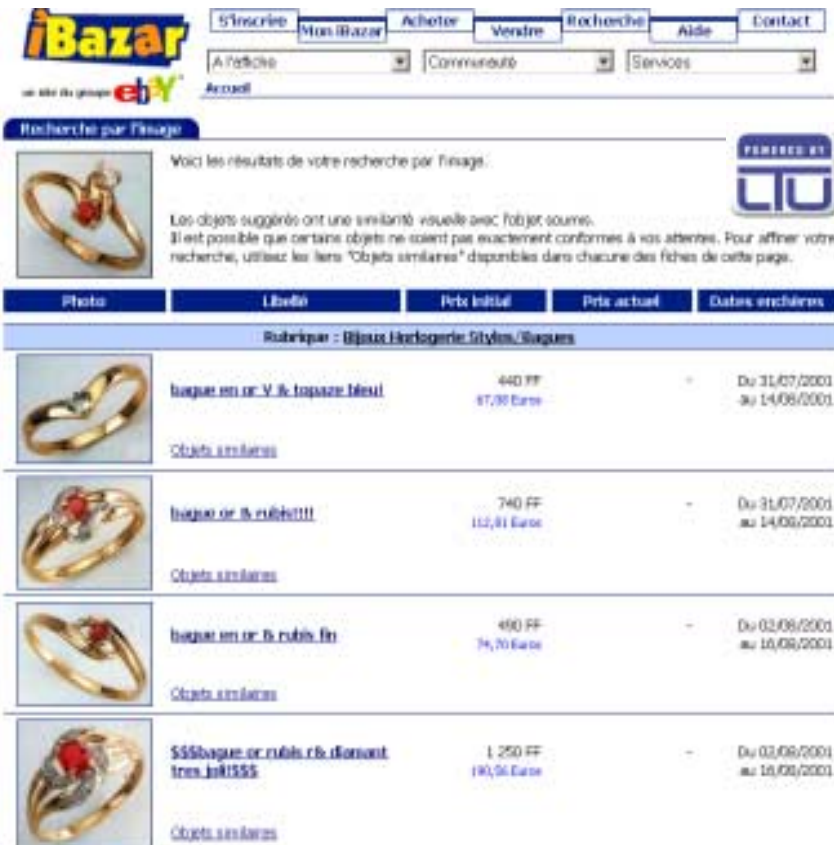
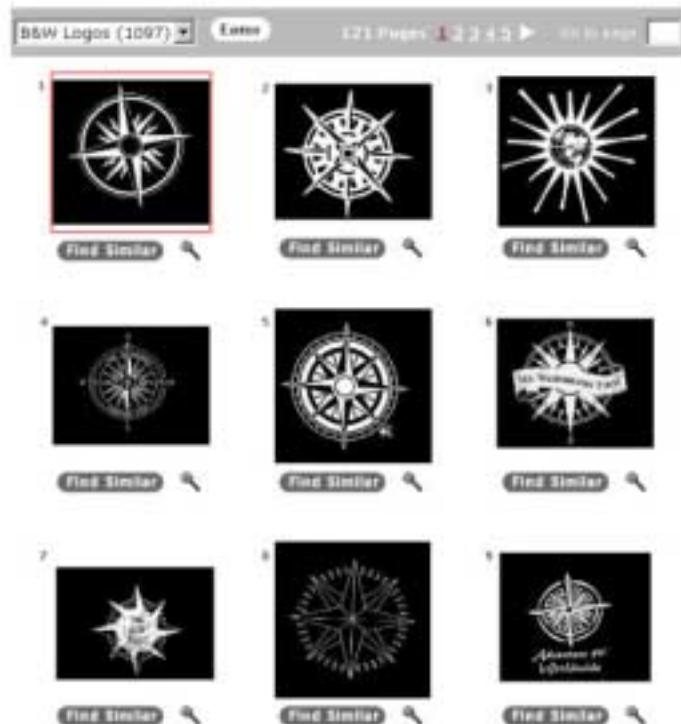
Applications along the rich media value chain



- adding annotations to images/videos as they are created



- search engine for image databases



- Detecting sensitive visual data in streams (filtering)

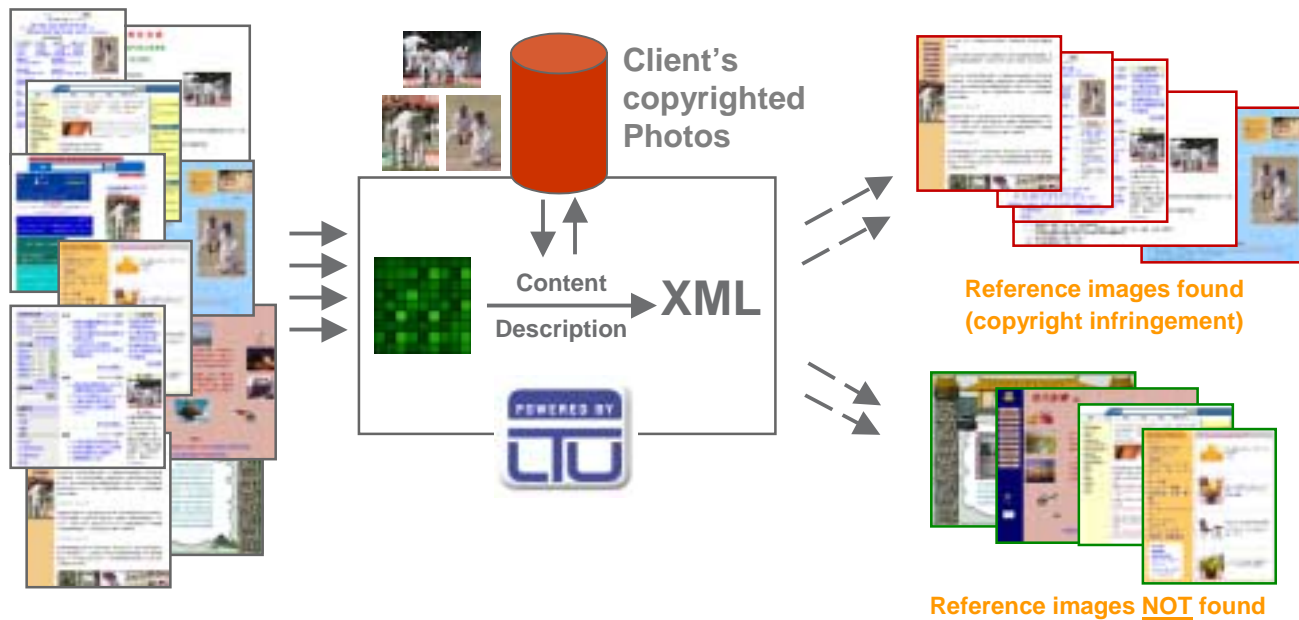
Image-Filter 4.1

Mail filter - Activity reporting

🚫 Rejected
🚫 Manually Rejected
🟡 Quarantined
✅ Manually Delivered
✅ Delivered

Mail Subject	Date	Sender	Recipient	Size	Images	XXX	WGE	CTN	BL	WL
🚫 void une photo de CN	03/05 18:30:14	demo@LTUtech.com	test	5 K	1	0	0	0	1	0
🚫 rcsq c'est super	03/06 18:53:07	am@LTUtech.com	test	3 K	1	0	0	0	1	0
🚫 euro de yahoo	03/06 18:54:09	alexmohe@yahoo.com	test	2 K	1	0	0	0	1	0
🚫	03/06 18:57:29	am@LTUtech.com	test	969 K	27	45	23	21	0	0
✅ Extra stuff !	03/11 12:18:04	fs@LTUtech.com	test	535 K	40	0	66	29	0	0
🚫 Image drôle	03/12 18:19:16	demo@LTUtech.com	test	5 K	1	0	0	0	1	0
🚫 regarde ça	03/13 09:28:39	demo@LTUtech.com	test	4 K	1	0	0	0	1	0
🚫 pas mal du tout!!!!!!!!!!!!	03/13 10:38:43	demo@LTUtech.com	test	16 K	1	80	25	27	0	0
🚫 here is my funny CEO	03/13 17:18:54	demo@LTUtech.com	test	5 K	1	0	0	0	1	0
✅ cb9879-001.jpg	03/14 14:28:35	sd@LTUtech.com	test	323 K	1	45	16	26	0	0
🚫 ec5667-005.jpg	03/14 14:28:52	sd@LTUtech.com	test	206 K	1	99	17	17	0	0
🟡 bd4407-001.jpg	03/14 14:29:23	sd@LTUtech.com	test	190 K	1	74	18	22	0	0
✅ cb9715-001.jpg	03/14 14:29:29	sd@LTUtech.com	test	185 K	1	21	31	25	0	0
🟡 bd4317-001.jpg	03/14 14:30:14	sd@LTUtech.com	test	170 K	1	74	17	22	0	0

- Detecting unauthorized use of restricted material (copyright, counterfeiting, misappropriations)



- Growth of Digital Imaging → need to automate image search & classification
- Applications: Management & Monitoring
- A rapidly-growing market where LTU technologies is the global leader
- Corporate market segments are identified today
- Generalization to « mass market » is on its way