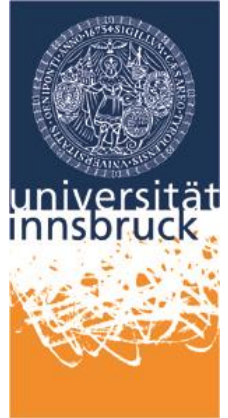


# KAOS project – WP4

University of Innsbruck

June 14, 2016

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*“Inference of accurate predictions”*

- *Overview:* extension and definition of new data mining and machine learning techniques capable of performing **predictions on running process instances**. The predictive models have to deal with **concept-drift** as well.

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- **T4.2** Definition of the language for the identification prediction objectives (e.g., remaining time, cost) [6 PM]
  - What is a prediction? Is it affecting the future? Are predictions influencing each other? How to talk about our predictions? (any XES extension?)
  - To define our language, maybe, we should also think about the assessment: how to assess recommendations? Can we deploy our system?



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  - Online learning + online prediction
  - Has to deal with noisy data
  - Has to deal with concept drifts (manually and automatically detected)
  - Should outperform other approaches

# Effort and Deliverables

- Effort

- UIBK (leader): 24 PM
- UniBZ: 4 PM

- Deliverables

- **D4.1** Techniques for the specification of prediction objectives [Report, M24]
- **D4.2** Basic multi-perspective prediction techniques [Report, M30]
- **D4.3** Refined version of the multi-perspective prediction techniques, robust to concept drifts [Report and prototype, M36]

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36												
WP1: Foundations of Organizational Modeling	FBK												D1.1												D1.2																								
WP2: Management of Event Logs	FUB						D2.1												D2.2							D2.3																							
WP3: Hybrid Monitoring	FBK																								D3.1							D3.2							D3.3										
WP4: Inference of accurate predictions	UIBK																								D4.1							D4.2							D4.3										
WP5: Case Studies	FUB																																																D5.1

# Next Steps

- Be involved in the discussion regarding what is multi-perspective
  - Definition of the prediction problem
  - Definition of the prediction language
- Start collecting literature material