Digital Processes in Real Estate Appraisal – Opportunities for Efficiency and Objectivity

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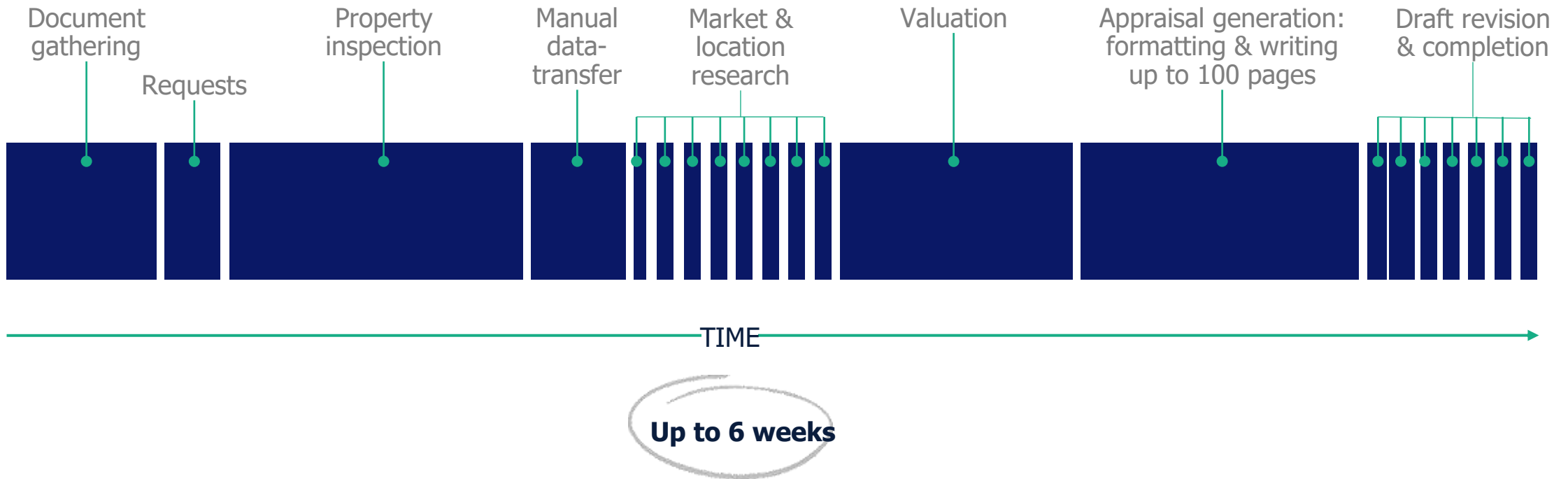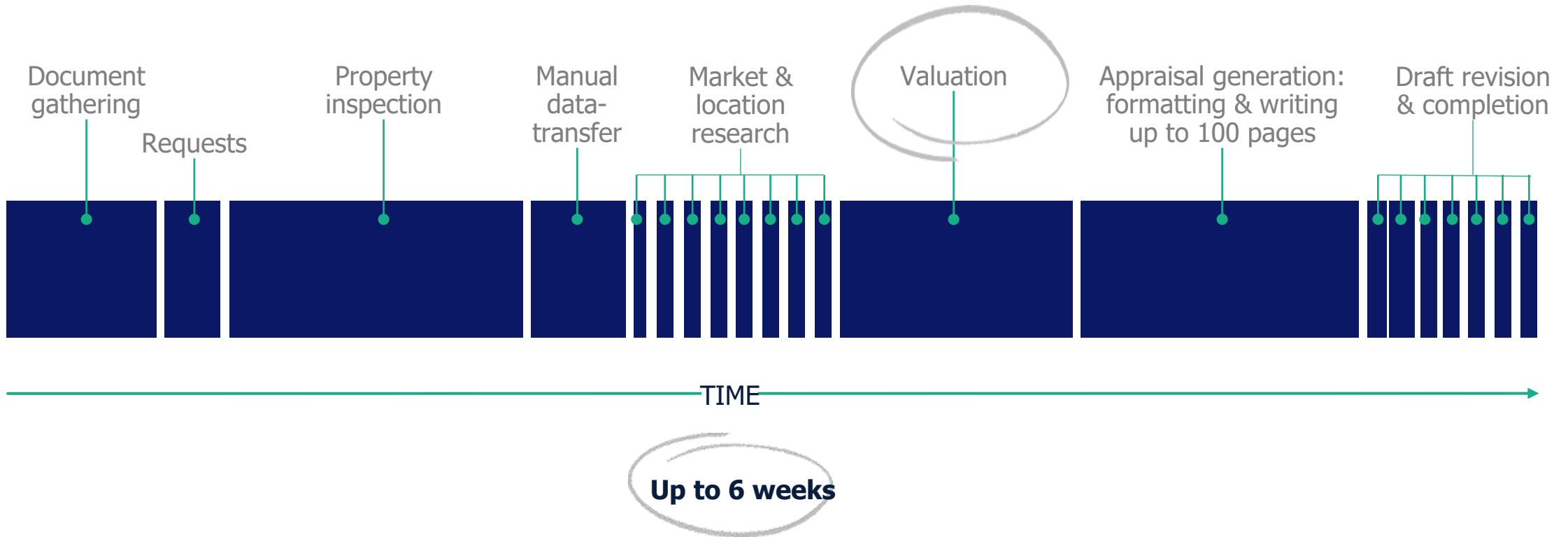
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Document gathering

Requests

Property inspection

Manual data-transfer

Market & location research

Valuation

Appraisal generation: formatting & writing up to 100 pages

Draft revision & completion

TIME

Up to 6 weeks

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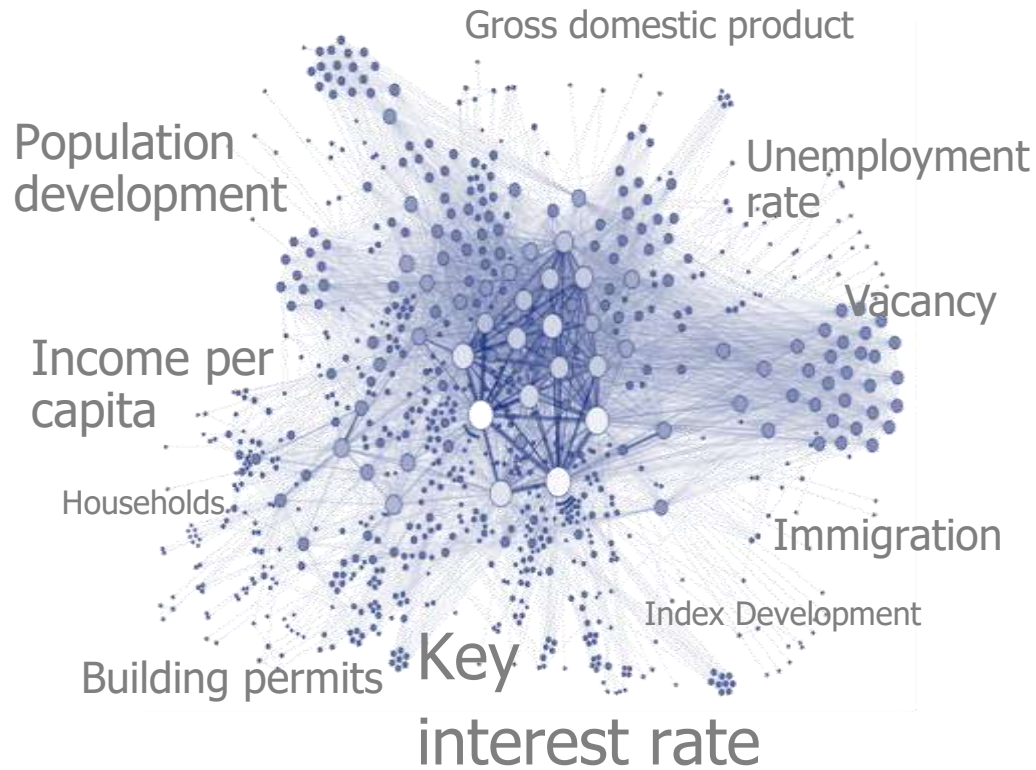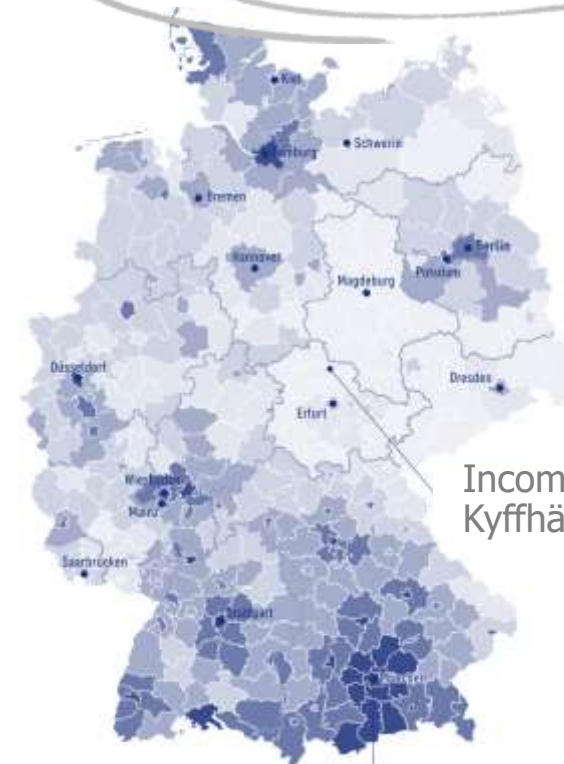Volunteering for the future –
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Determining the discount rate in real estate valuation

- Today: either determined retrospectively via back calculation from realized purchase prices or estimated by the appraiser in its entirety (Problem: only few real estate market data available)

- Our approach: Finding the CAUSES for the level and behaviour of discount rates (=returns)

- Causes are mainly from external factors like the key interest rate and not from the real estate market directly
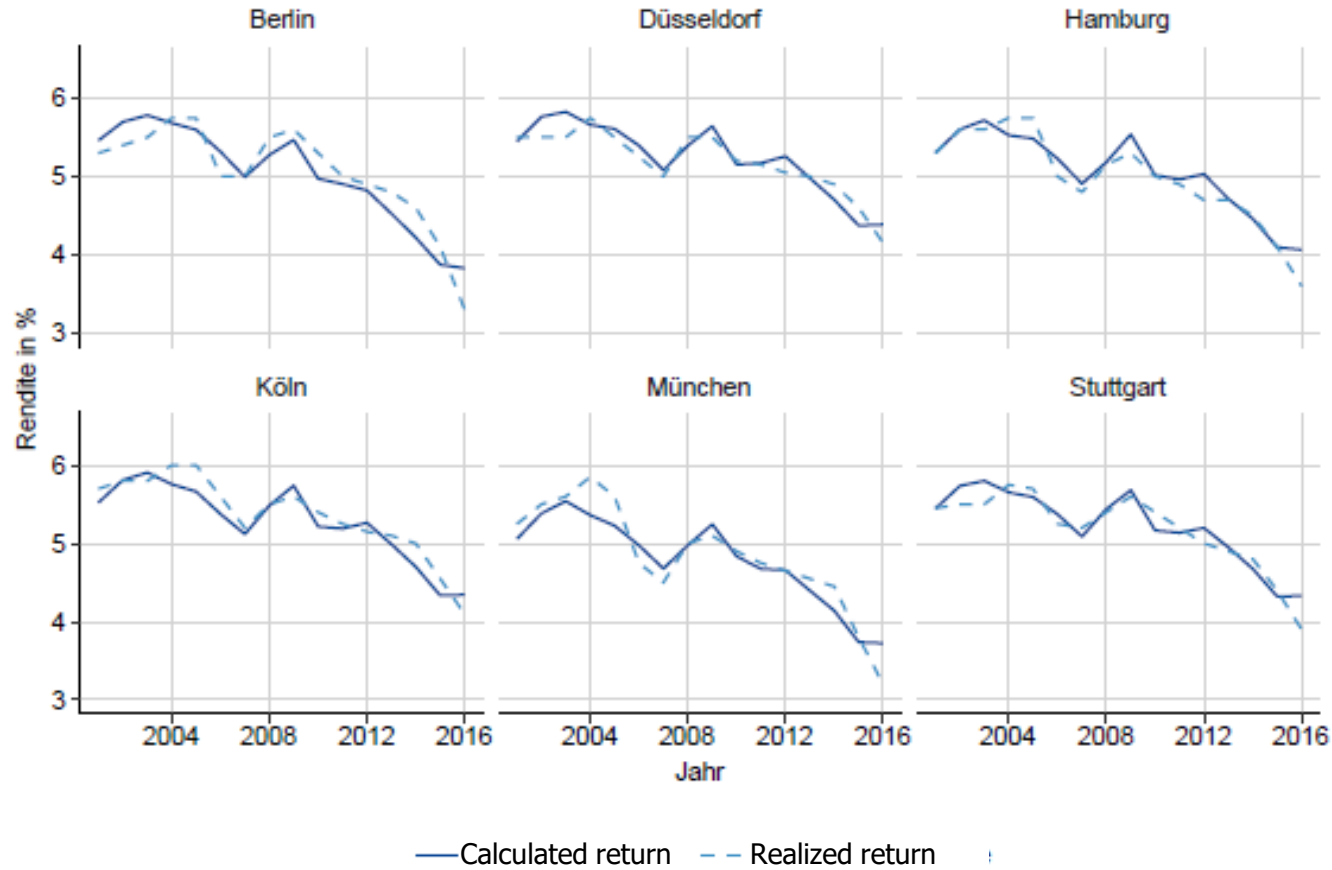
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Time Series Cross Sectional Methods

Discount rate
= 3,74 + 0,2 x base rate – 5,38 x GDP +
...

Gross domestic product

Population development

Unemployment rate

Vacancy

Income per capita

Households

Immigration

Index Development

Building permits

Key interest rate

Income per capita:
Kyffhäuser-Kreis 17.700 €

Income per capita:
Munich 32.766 €

Calculated return   - - Realized return

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Determining the market rent

- Today: models to quantify market rents based on object properties & regional factors exist for different submarkets (they are only valid for this specific submarket)

- Problem: for regions with few data available, such models either don't exist or are unreliable

- Our approach: creating one model valid for the whole market: explicitly model the difference between submarkets

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Gravitational model (potential model)