

Methodological Approach for Designing GIS Management System for State Property

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GIS Management System for Police's Properties

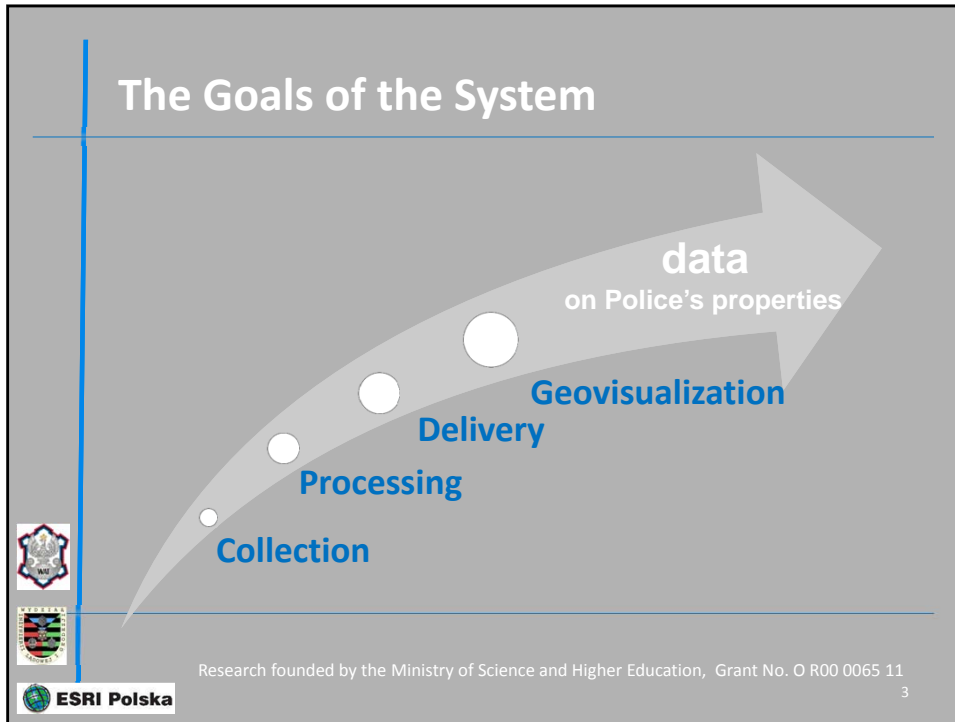
- **AIM OF THE PROJECT**
Facilitate and increase efficiency of the management of the Police's properties
- **PROJECT RESULTS**
Prototype of the system
- **CONTRACTOR**
Research-Industry Consortium:
 - Military Academy of Technology the Jarosław Dąbrowski,
 - ESRI Poland Ltd
- **PROJECT DRUATION** - August 2010 -August 2012



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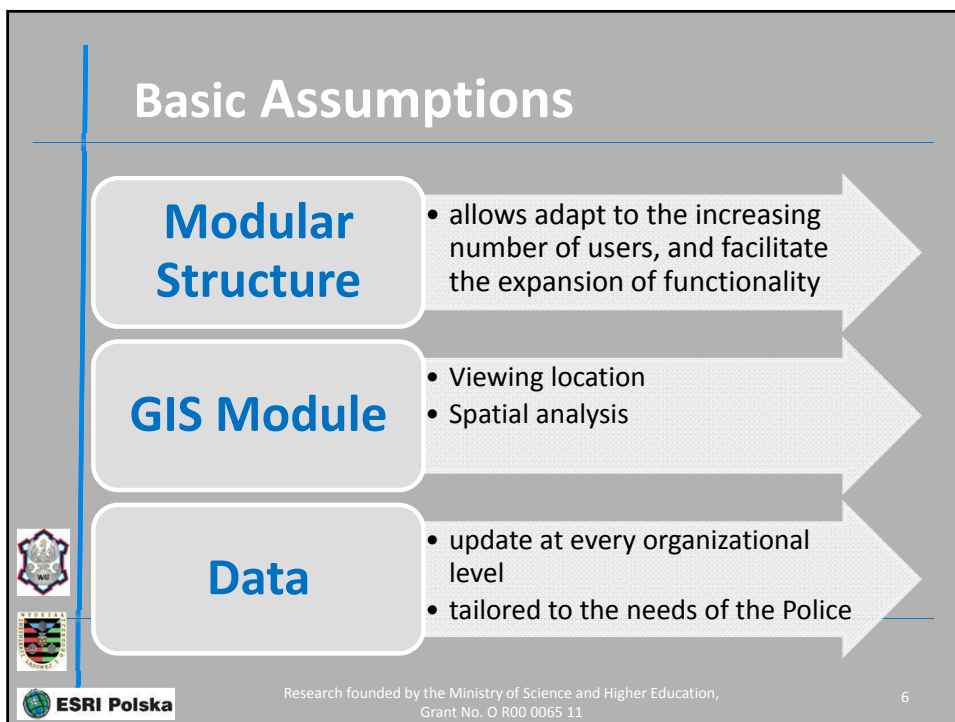
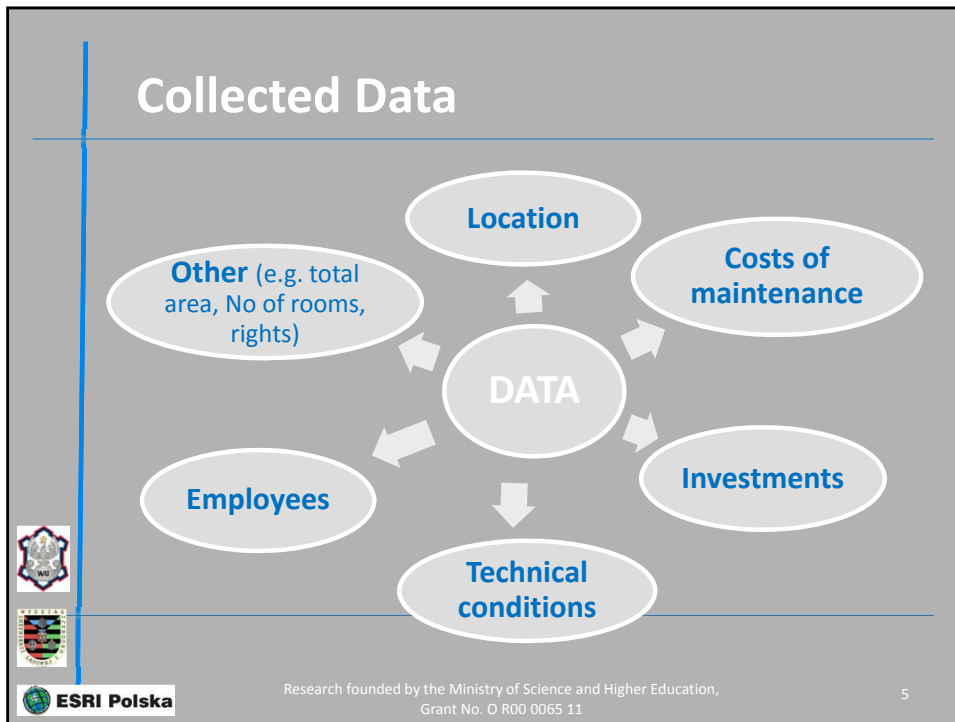
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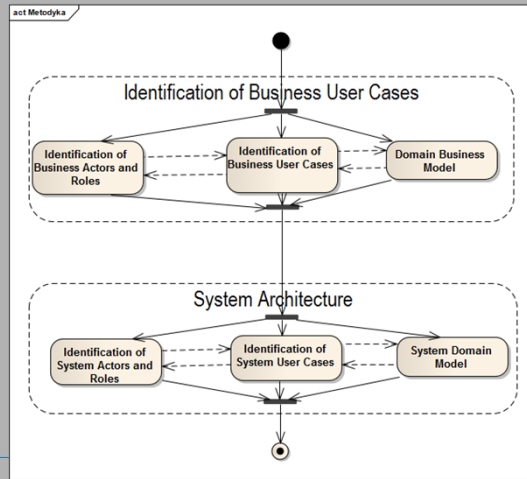
LP.	Jednostka	Łączne koszty utrzymania obiektów za 6 m-cy		Zmiana w procentach	Przeciętne zatrudnienie		Powierzchnia użytkowa ogółem		Wskaźnik kosztów na 1 zatrudnionego		Wskaźnik kosztów w przeliczeniu na 1 m ² powierzchni użytkowej		Zmiana w procentach	
		w 2009 r.	w 2010 r.		w 2009 r.	w 2010 r.	w 2009 r.	w 2010 r.	w 2009 r.	w 2010 r.	w 2009 r.	w 2010 r.		
		zł	zł		%	os.	os.	m ²	m ²	zł/os.	zł/os.	%		zł/m ²
1	KWP WROCLAW	8 759 425	8 913 211	1,76%	9 202	9 066	282 391	278 442	952	983	-3,28%	31	32	3,20%
2	KWP BYDGOSZCZ	5 281 572	6 372 898	20,66%	6 165	6 002	137 813	135 574	877	1 062	21,14%	38	47	22,66%
3	KWP LUBLIN	5 292 289	5 621 698	6,22%	6 387	6 216	151 012	151 051	829	904	9,15%	35	37	6,20%
4	KWP GORZÓW WLKP.	3 080 606	3 179 072	3,20%	3 309	3 209	103 808	104 652	991	991	0,00%	30	30	0,00%
5	KWP ŁÓDŹ	8 683 797	9 051 660	4,24%	8 027	7 826	206 570	207 958	1 070	1 157	8,19%	42	44	5,45%
6	KWP KRAKÓW	7 967 203	8 366 622	6,64%	3 983	3 898	184 924	186 315	879	955	8,61%	43	46	7,00%
7	KWP z/s RADOM	6 295 496	6 327 774	0,52%	5 042	5 066	148 592	147 232	900	870	-3,33%	42	40	-4,76%
8	KWP CIEPICE	2 846 662	3 123 348	9,73%	1 994	2 909	91 372	93 161	900	1 036	15,00%	31	32	3,23%
9	KWP PRZESMIELE	4 469 831	4 778 855	7,14%	512	530	143 815	148 978	879	938	6,71%	30	34	13,33%
10	KWP BIAŁYSTOK	3 677 457	3 773 329	2,72%	1 083	1 111	38 856	41 114	900	1 111	23,44%	33	41	24,24%
11	KWP GEDANIN	595 000	632 900	6,37%	1 075	68	17 800	19 000	900	1 000	11,11%	37	40	8,11%
12	KWP KATOWICE	535 000	520 000	-2,82%	71	64	30 000	30 100	900	900	0,00%	38	40	5,26%
13	KWP KIELCE	127 000	106 000	-16,53%	63	35	9 000	8 000	900	700	-22,22%	33	28	-15,15%
14	KSP WAWA	324 000	318 000	-1,85%	58	57	26 400	25 000	1 200	1 100	-8,33%	50	48	-4,00%
15	KWP CIELIECZYN	269 000	257 800	-4,16%	59	43	12 900	11 000	900	1 000	11,11%	35	38	8,57%
16	KWP POZNAN	802 000	814 000	1,50%	39	39	25 900	25 500	1 200	1 200	0,00%	41	38	-7,32%
17	KWP SZCZECIN	257 000	257 000	0,00%	71	56	16 000	15 500	1 000	1 000	0,00%	39	38	-2,56%
	Razem	40 000 000	42 574 000	5,67%	22 000	23 600	2 298 000	2 268 000	900	1 000	11,11%	37	38	2,71%

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Methodological Approach

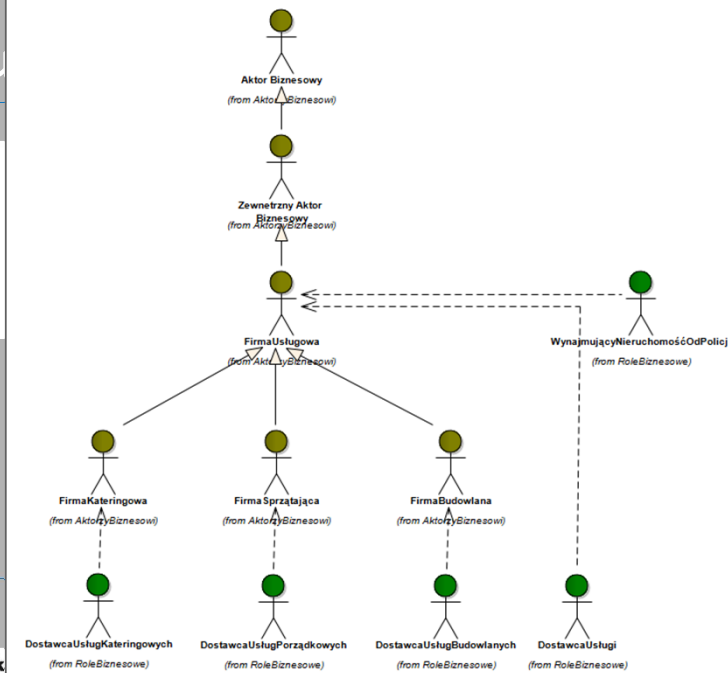


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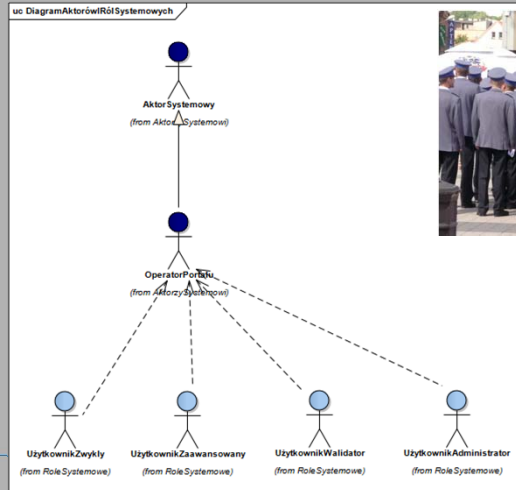
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uc Diagram Typów Firm Usługowych



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System Actors and Roles

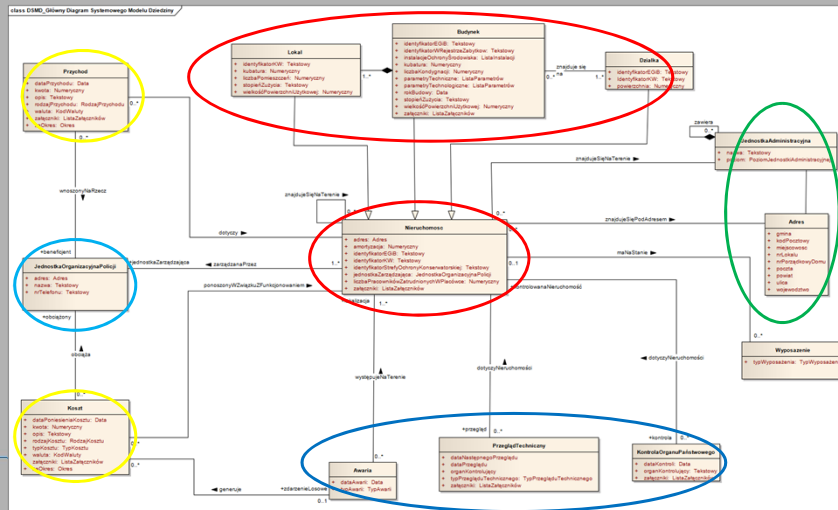


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System Domain Model



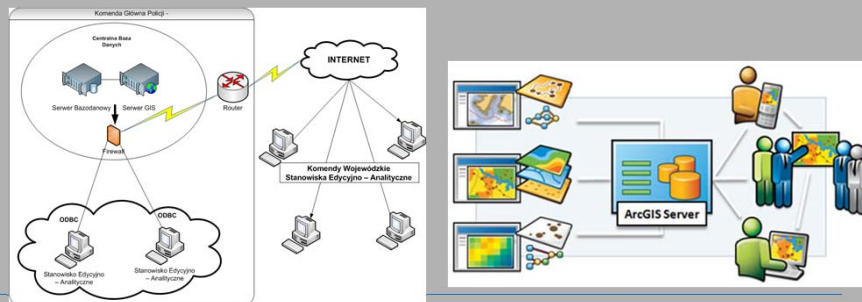
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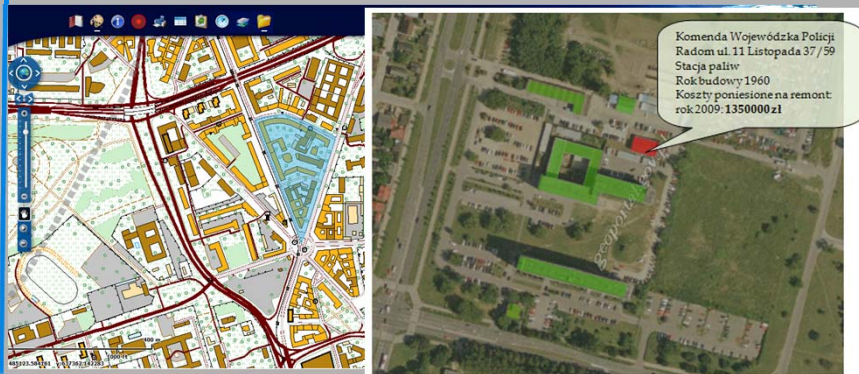
Implementation assumptions

Development platform – Microsoft Silverlight
Database – PostgreSQL
GIS Environment – ArcGIS

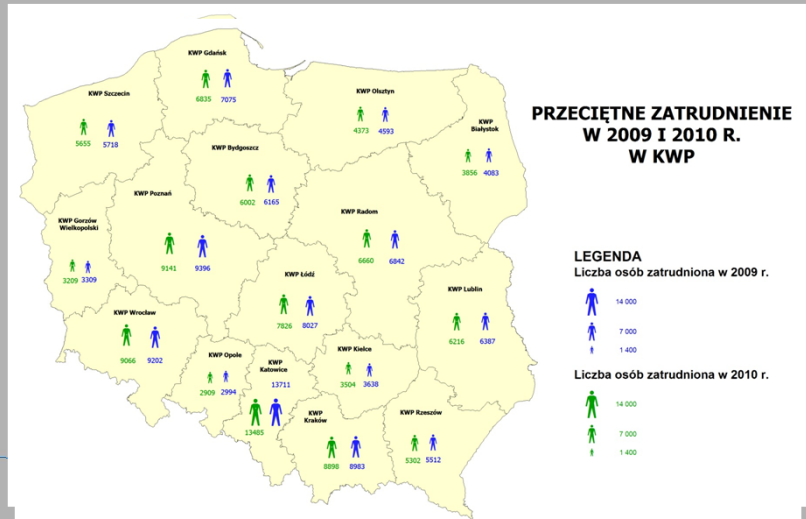


Sample GIS screens

Intuitive user interface



Visualization



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Thank You For Attention



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