Investigating the Implementation of KPIs in Large-Scale Agile Development

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Organizations

Organization	Sector	Company size (Employees)	Number of interviews
BankCo	Finance	47.000+	2
CarCo1	Automotive	36.300+	1
CarCo2	Automotive	120.700+	1
ConsultCo	Consultancy	270.000	5
HealthCareCo	Healthcare	54.000	3
RetailCo1	Retail	360.000+	1
RetailCo2	Retail	155.000	1
TelecommunicationCo	Telecommunication	100.700	1
TransportationCo	Transportation	337.500	1
Inverso	**Insurance**	**120+**	**1**
VKB	**Insurance**	**6.800+**	**3**

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Large-Scale Agile Software Development (1)

Organization	Start Agile Transformation (in years)	Start Large-Scale Agile Transformation (in years)
BankCo	3-10	3-5
CarCo1	6-10	1-2
CarCo2	6-10	3-5
ConsultCo	-	-
HealthCareCo	11-15	6-15
RetailCo1	3-5	3-5
RetailCo2	6-10	1-2
TelecommunicationCo	11-15	11-15
TransportationCo	3 - 5	3-5
Inverso	1-2	1-2
VKB	1-5	1-5

Ø 6-7 years

Since the start of the agile transformation

Ø 4-5 years

Since the start of the large-scale agile transformation

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Large-Scale Agile Software Development (2)

Organisation	Customization	Different Frameworks in Organization	Frameworks
BankCo	✓		SAFe
CarCo1	✓	✓	SAFe, Scrum-of-Scrums
CarCo2			Scrum-of-Scrums, Scrum@Scale
ConsultCo	✓	✓	LeSS, SAFe, Scrum-of-Scrums
HealthCareCo	✓	✓	LeSS, SAFe, Scrum-of-Scrums
RetailCo1	✓	✓	SAFe, Scrum-of-Scrums. Spotify
RetailCo2	✓	✓	LeSS, Nexus, SAFe, Scrum-of-Scrums, Spotify
TelecommunicationCo	✓		LeSS, Scrum-of-Scrums
TransportationCo	✓		SAFe
Inverso			**Scrum@Scale**
VKB	✓	✓	**SAFe, Nexus, Scrum-of-Scrums**

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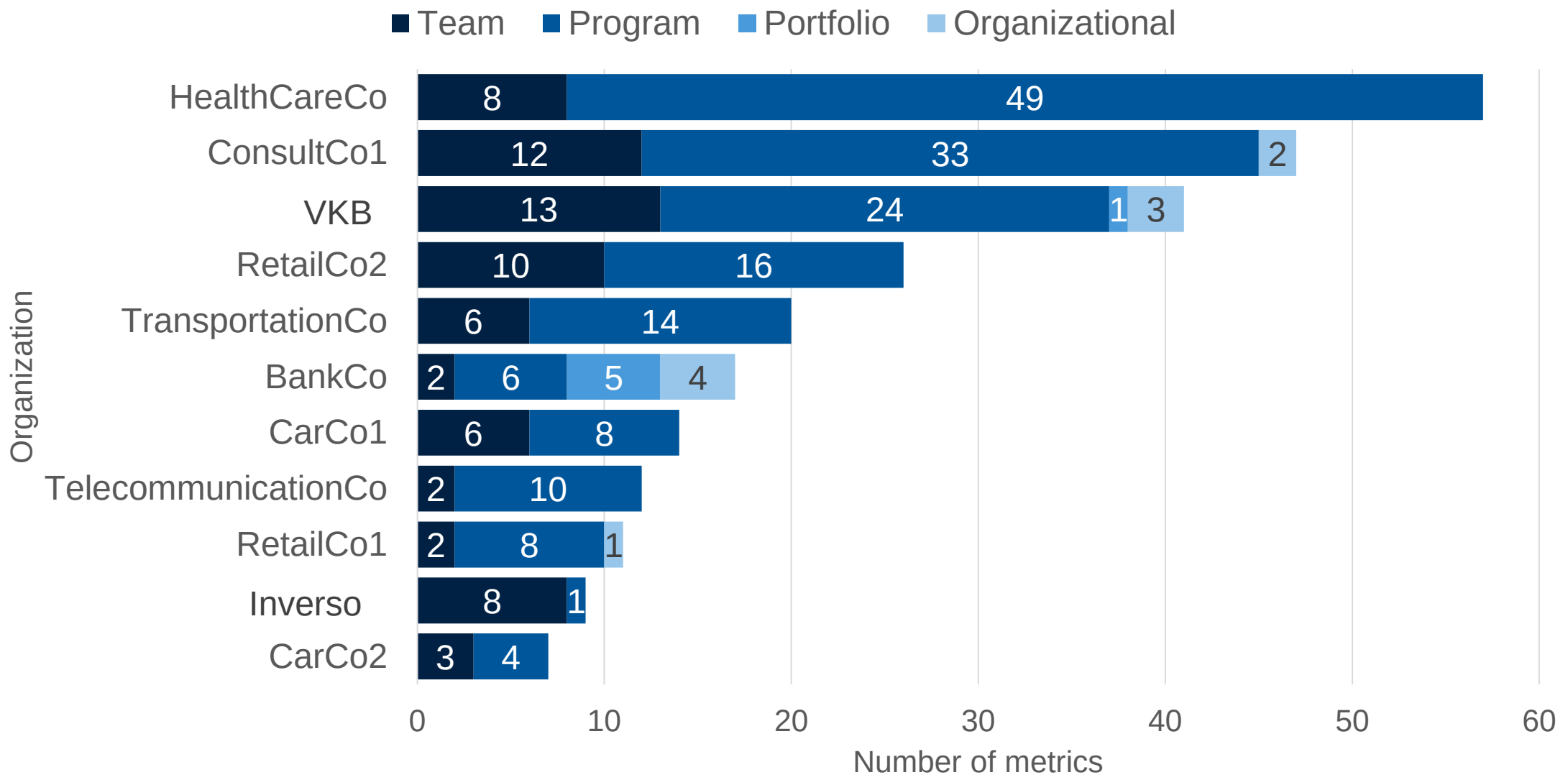
Metrics in Large-Scale Agile Software Development (1)



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Metrics in Large-Scale Agile Software Development (2)

Organization	Team	Program	Portfolio	Organizational	Total
BankCo	2	6	5	4	17
CarCo1	6	8	-	-	14
CarCo2	3	4	-	-	7
ConsultCo	12	33	-	2	47
HealthCareCo	8	49	-	-	57
RetailCo1	2	8	-	1	10
RetailCo2	10	16	-	-	26
TelecommunicationCo	2	10	-	-	12
TransportationCo	6	14	-	-	20
Inverso	**8**	**1**	**-**	**-**	**9**
VKB	**13**	**24**	**1**	**3**	**41**

Ø 6 Metriken
on team level in each organisation

Ø 16 Metriken
on program level in each organisation

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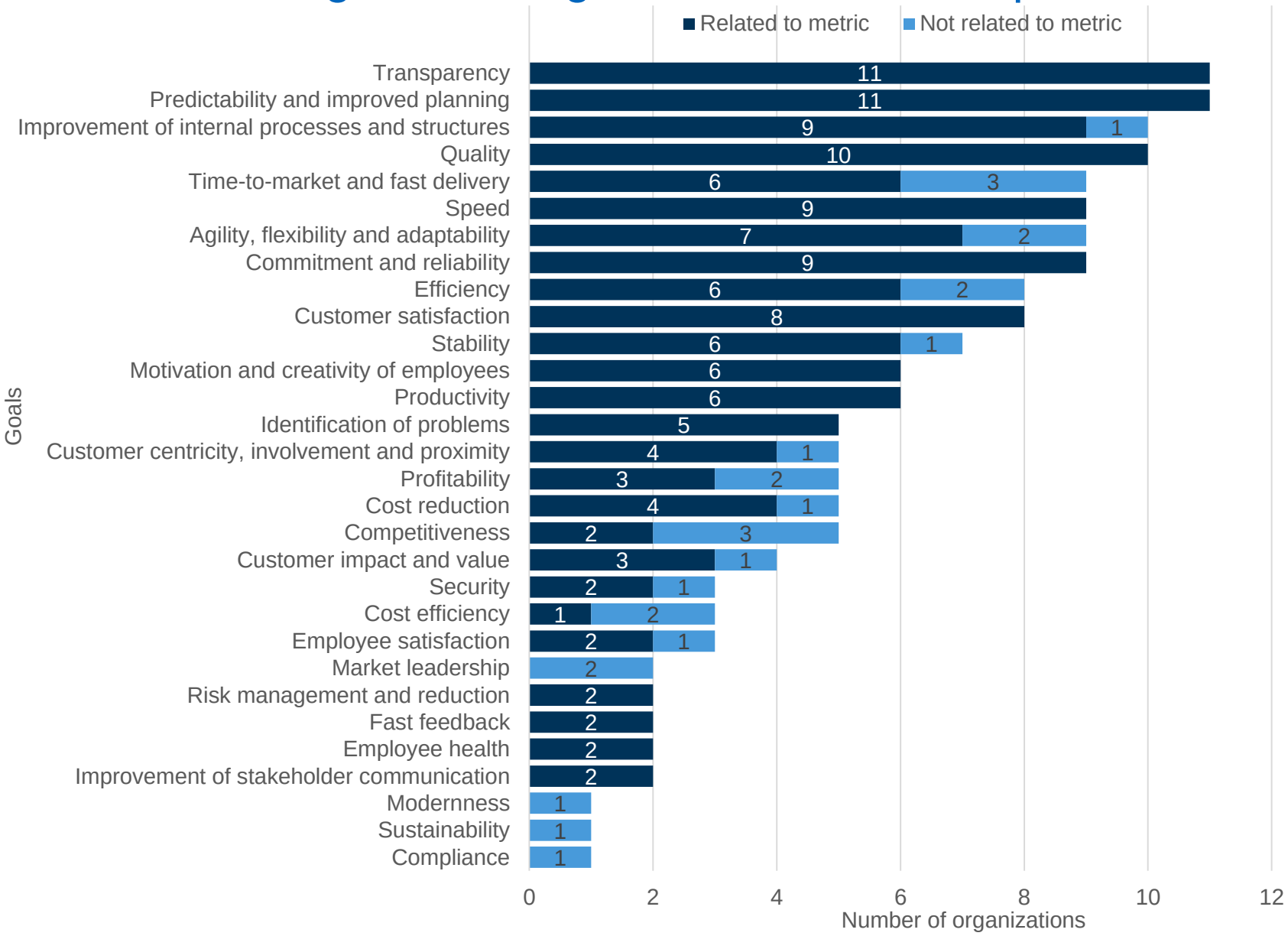
Goals in Large-Scale Agile Software Development



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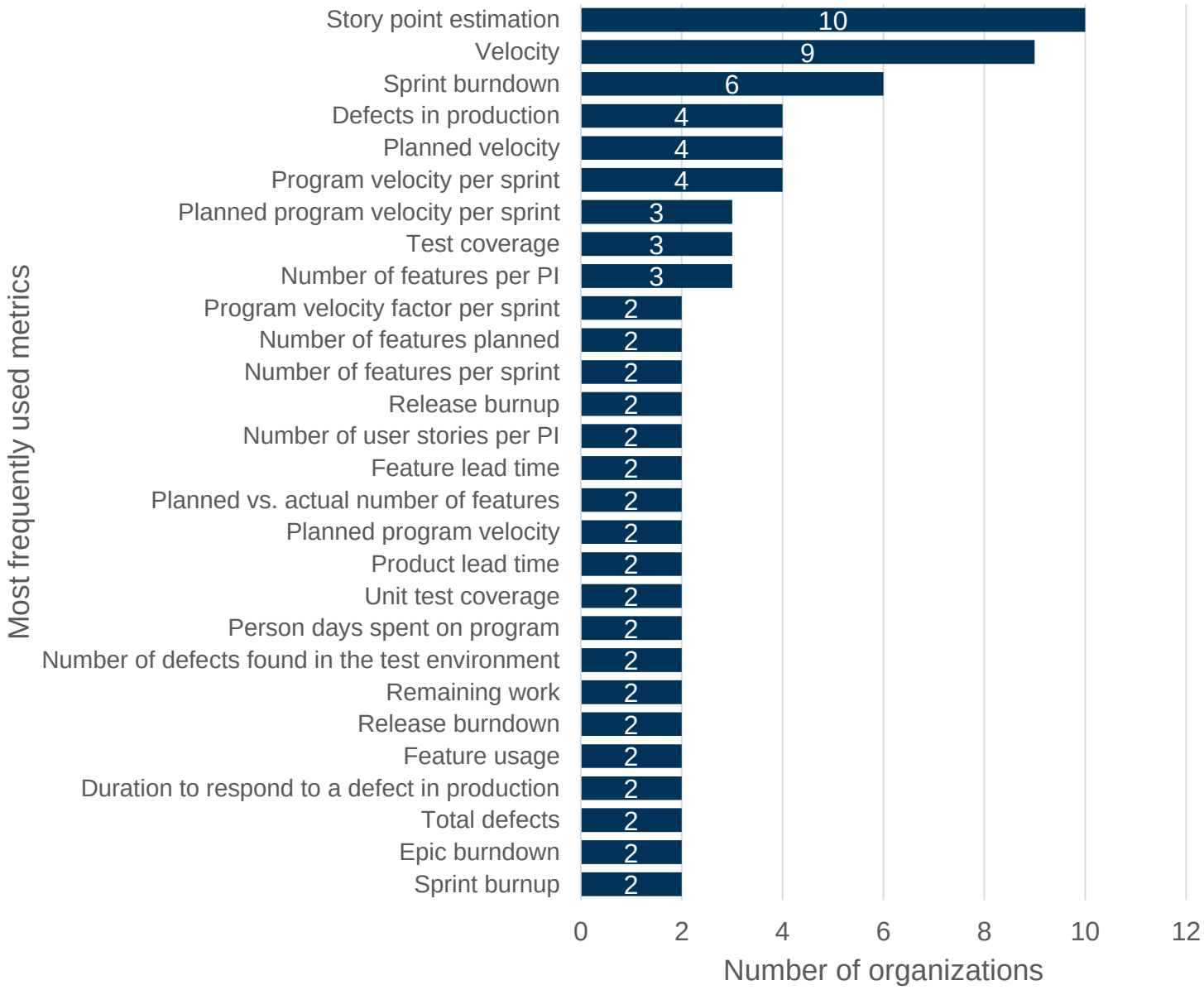
Most frequently used metrics



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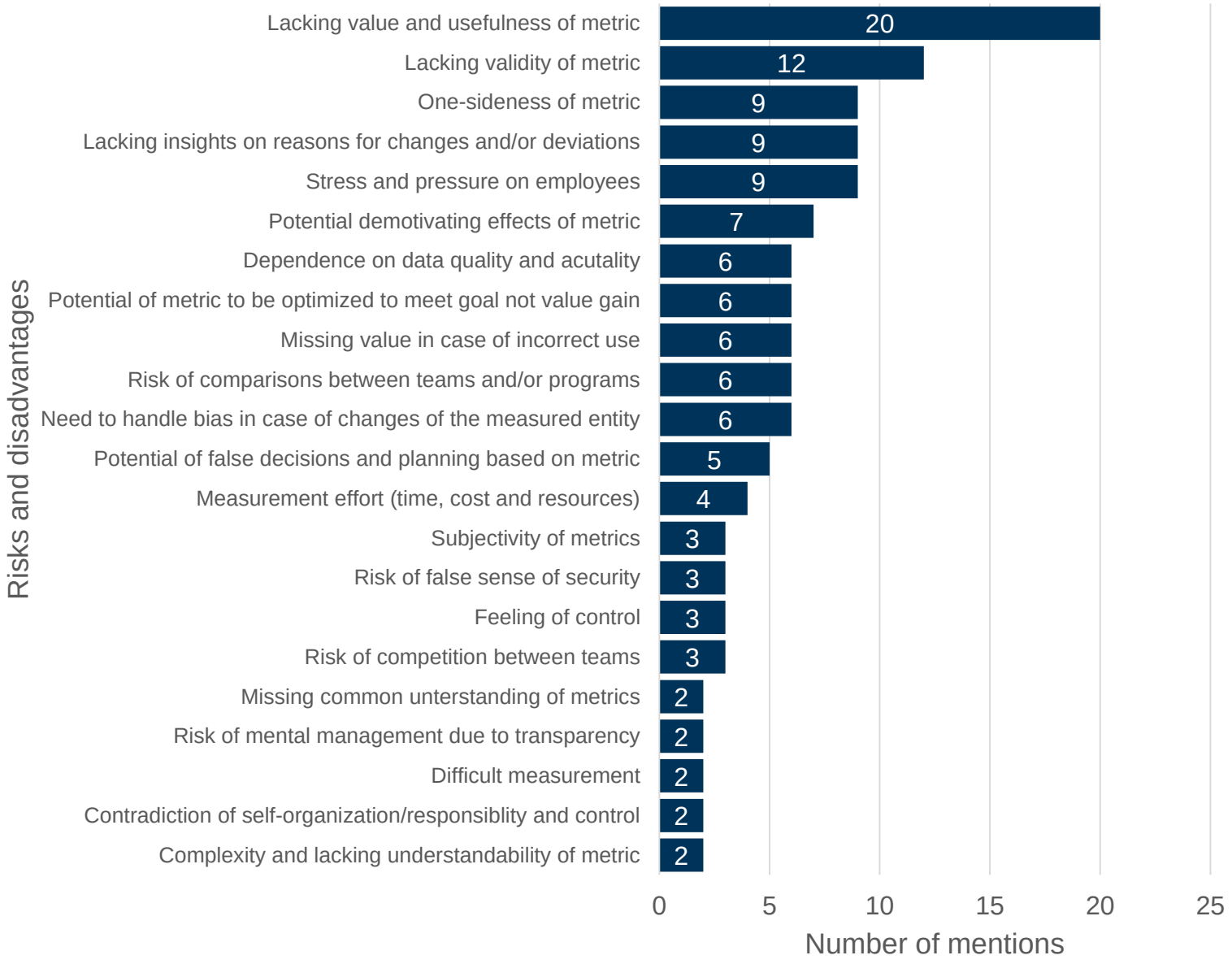
Common risks and disadvantages of metrics



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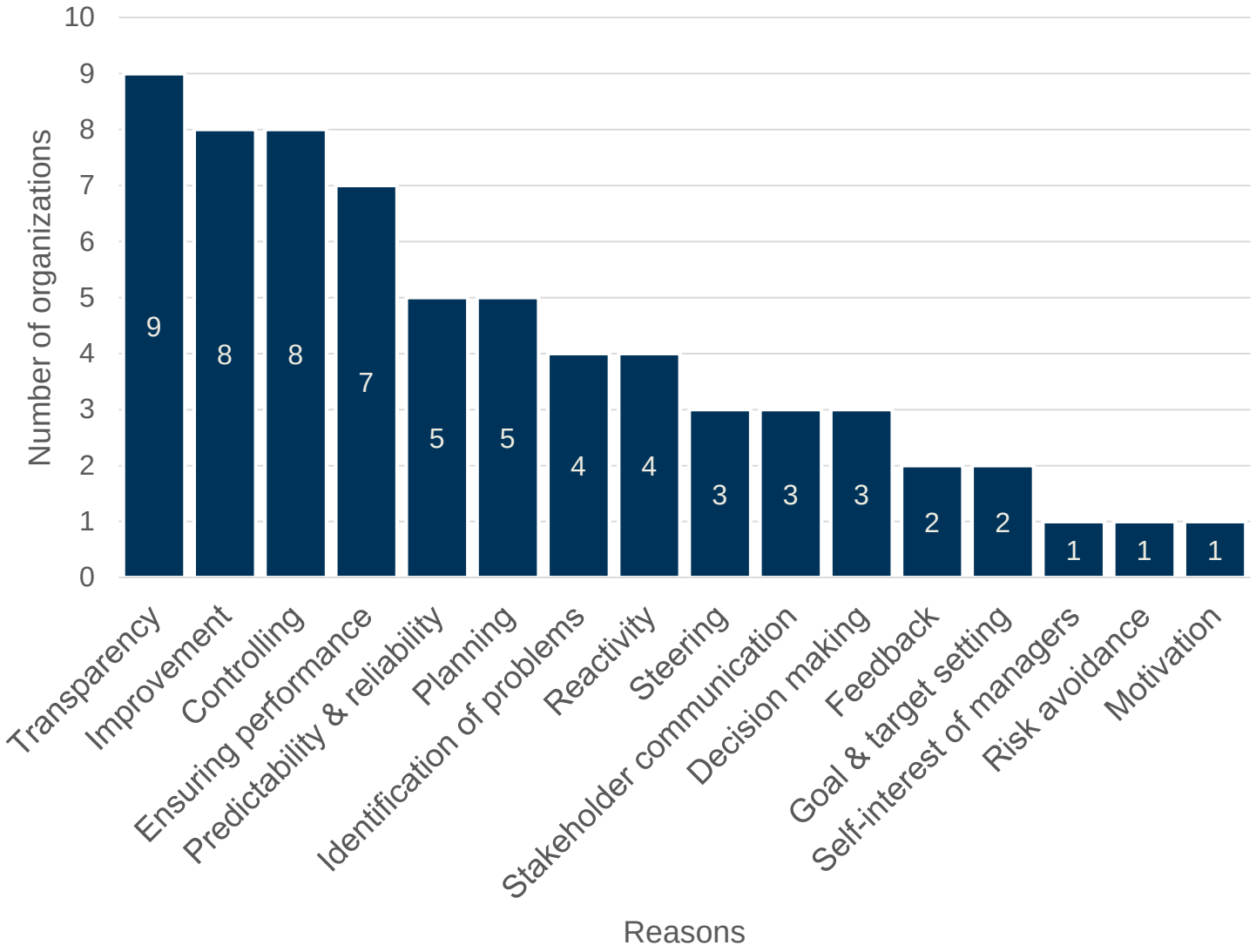
Reasons for Using Metrics in Large-Scale Agile Software Development



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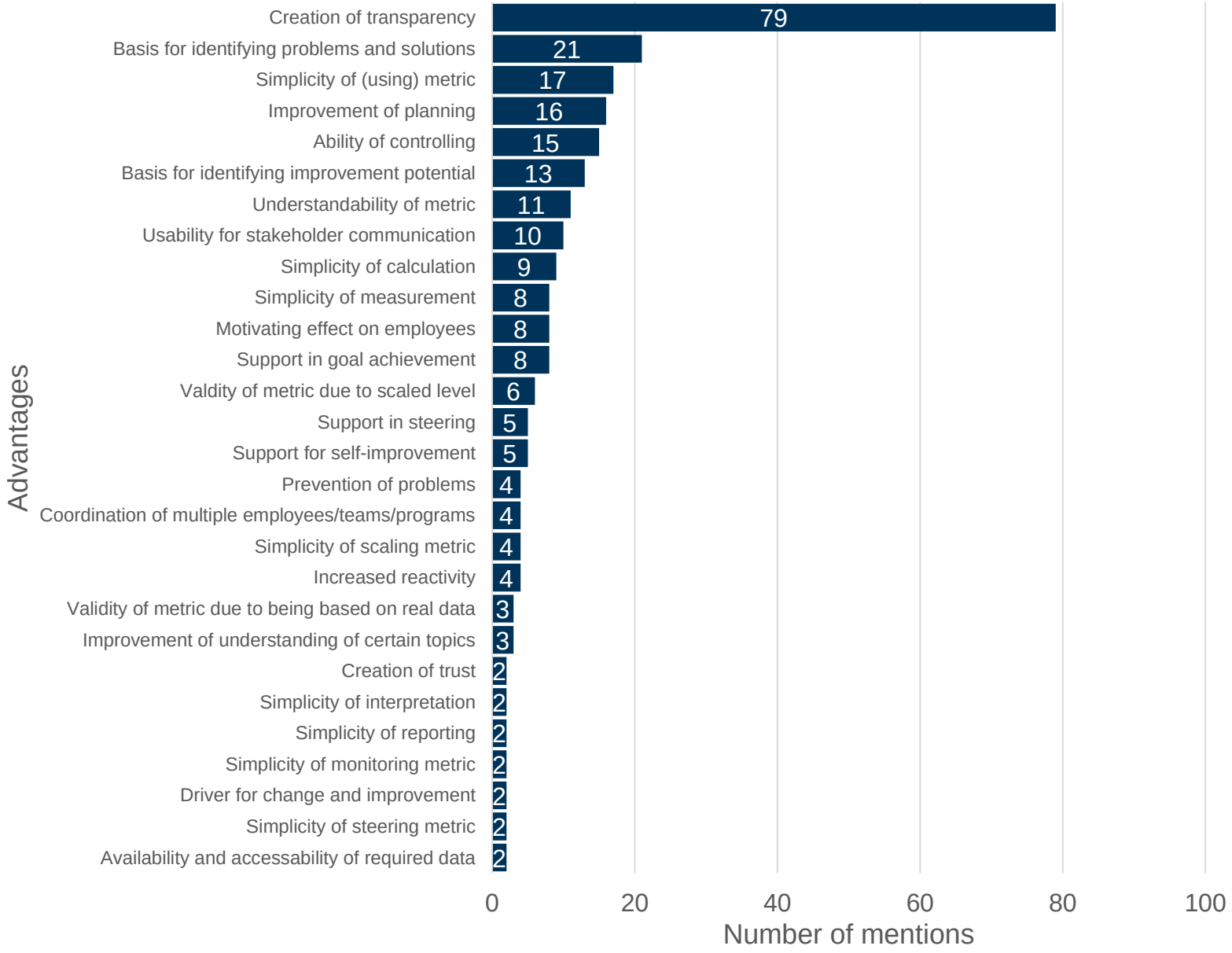
Advantages of using metrics



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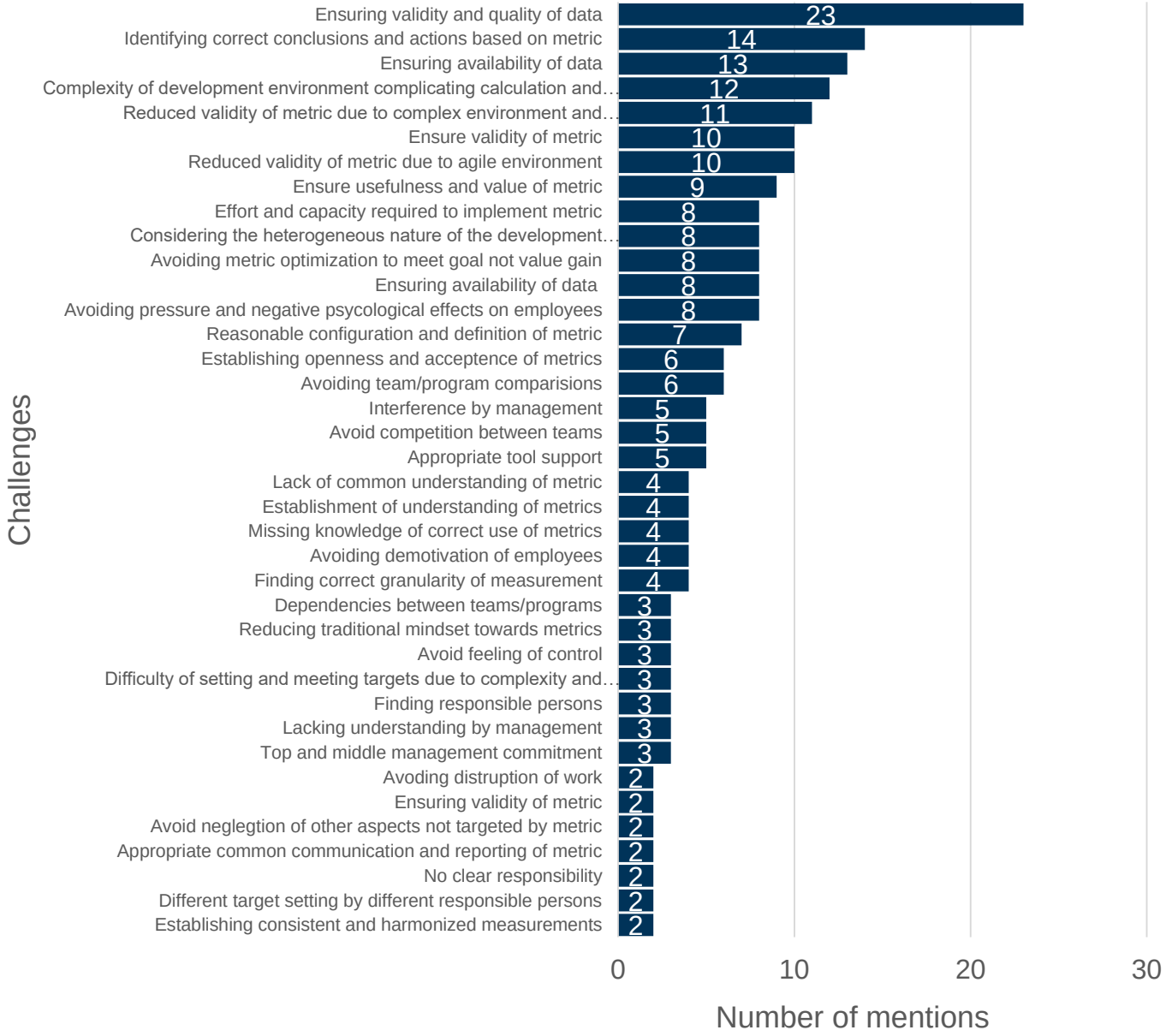
Metric-related challenges in large-scale agile software development



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