



IMPACT OF DIGITAL TRANSFORMATION ON WORK AND EMPLOYMENT

QUESTIONNAIRE ANALYSIS

SEPTEMBER 2019

#1

GENERAL OUTLOOK

This analysis is based on 132 responses received from 11 E.U. countries: Spain (14), France (7), Italy (9), Finland (7), Romania (14), the Netherlands (3), Belgium (17), Czechia (31), Poland (23), Sweden (6) and Germany (5).

The weighted averages are calculated on the basis of the number of persons employed in industry in the given countries (NACE: B “Mining and quarrying”, C “Manufacturing” and D “Electricity, gas, steam and air conditioning supply”). The table below summarizes the number of persons employed in industry according to latest available data in Eurostat (2016):

	Number of persons employed in industry, in million	Total person employed in business economy, in million	Share of persons employed in industry from total business economy, except financial and insurance activities
Belgium	0,52	2,16	24%
Czechia	1,36	2,82	48%
Finland	0,35	1,34	26%
France	3,11	14,25	22%
Germany	7,64	26,65	29%
Italy	3,78	10,37	36%
Netherlands	0,72	4,84	15%
Poland	2,86	7,16	40%
Romania	1,32	3,84	34%
Spain	1,92	9,60	20%
Sweden	0,64	2,70	24%

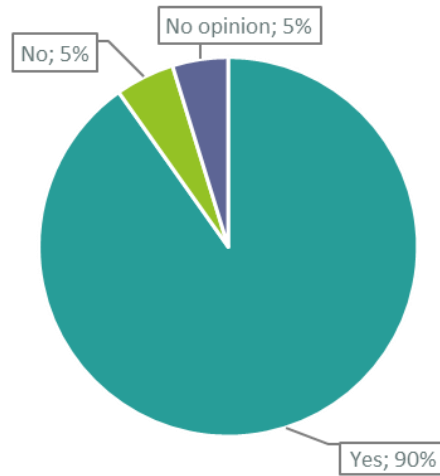
Part 1

DIGITALISATION - QUESTIONS ON THE IMPACT ON EMPLOYMENT CONDITIONS IN YOUR SECTOR

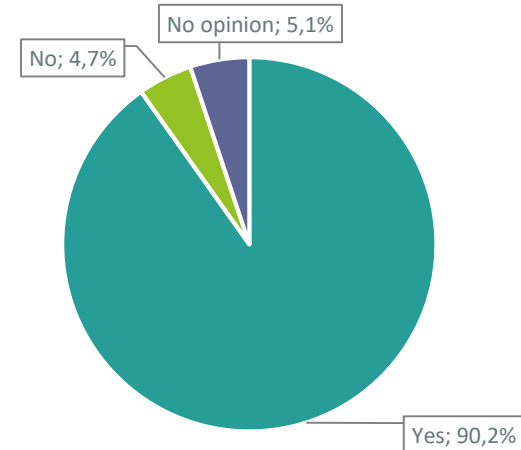
90 % of the respondents at Southwestern Europe level agree that digitalisation reduce errors and produce gains in the quality process.

Does digitalisation reduce errors and produce gains in the quality of processes and products?

Weighted average Southwestern Europe (3)

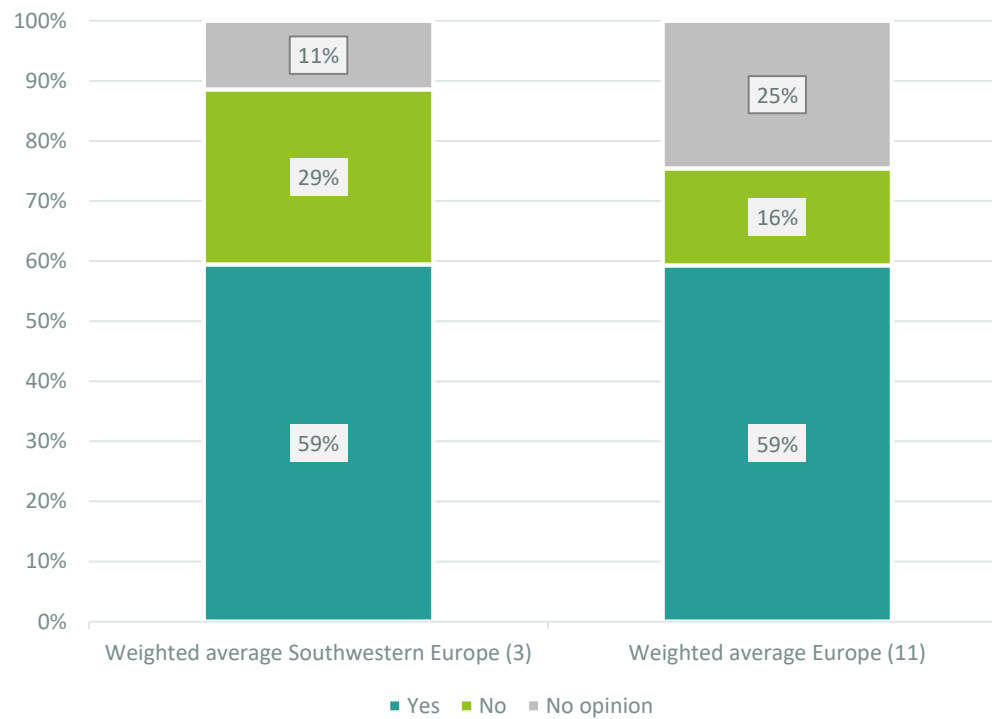


Weighted average Europe (11)

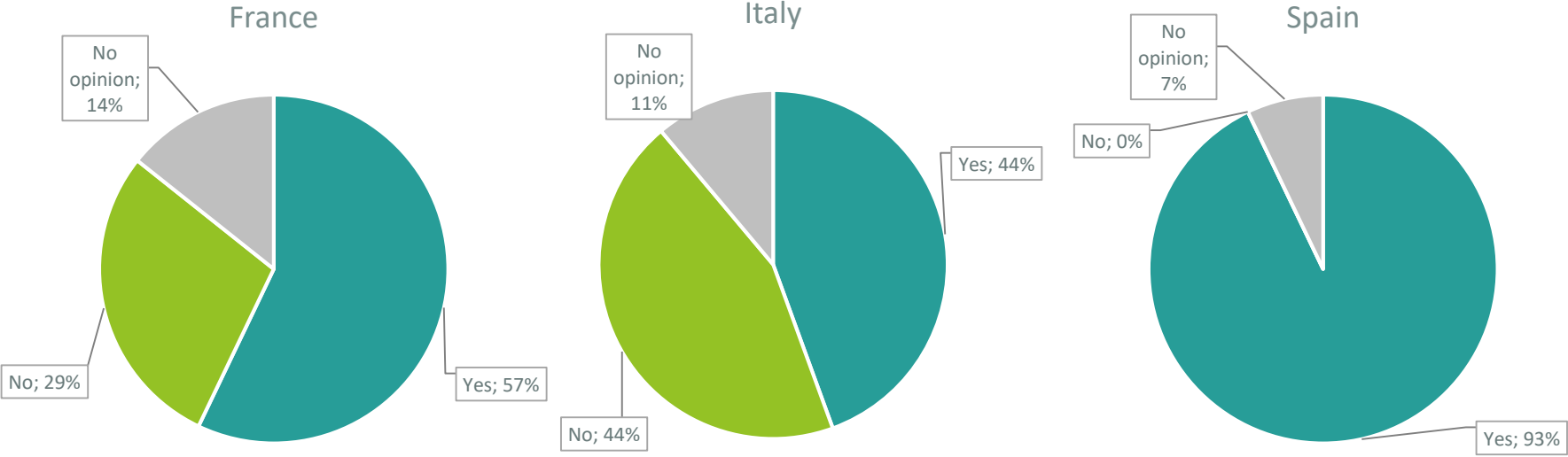


same results

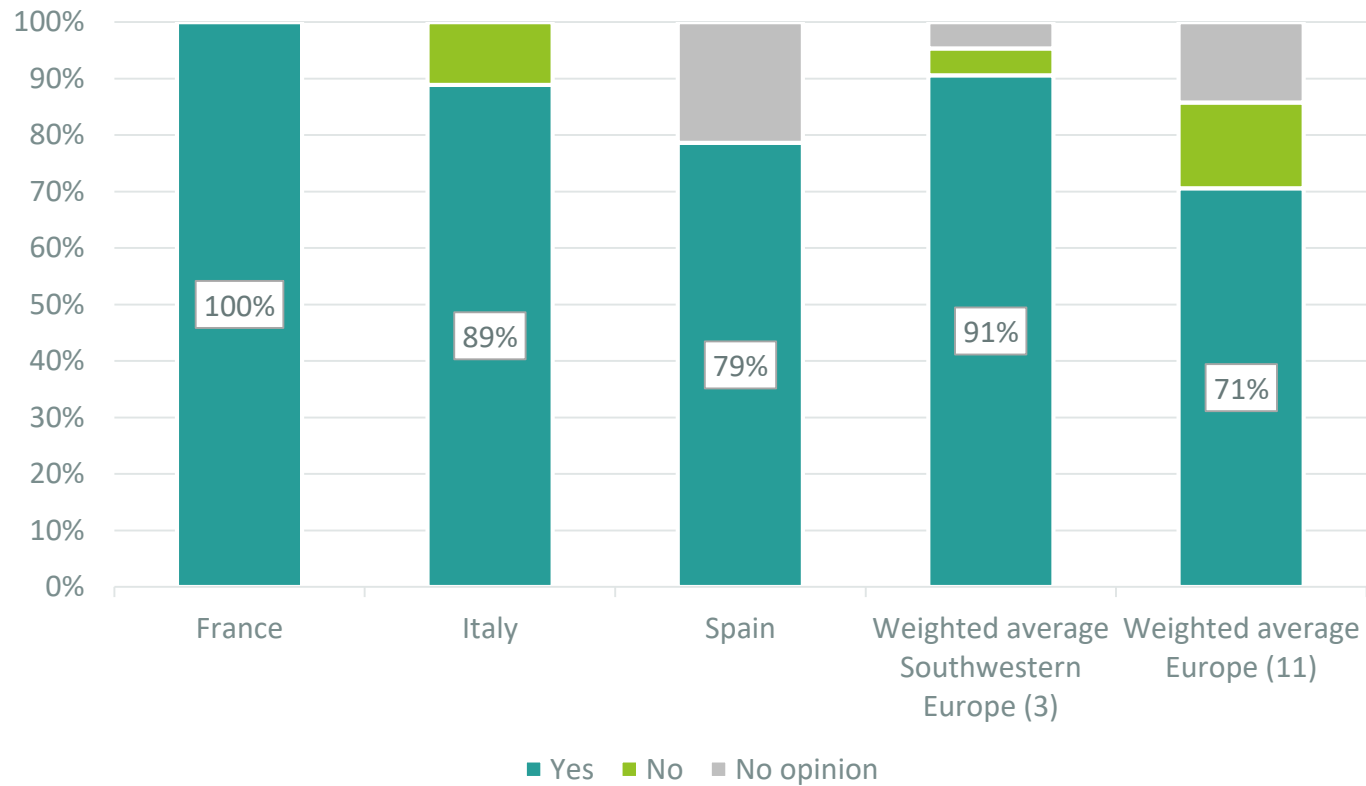
By automating repetitive manual tasks, does digitalisation cut unskilled jobs, and consequently, does it increase the average skill level of the workforce?



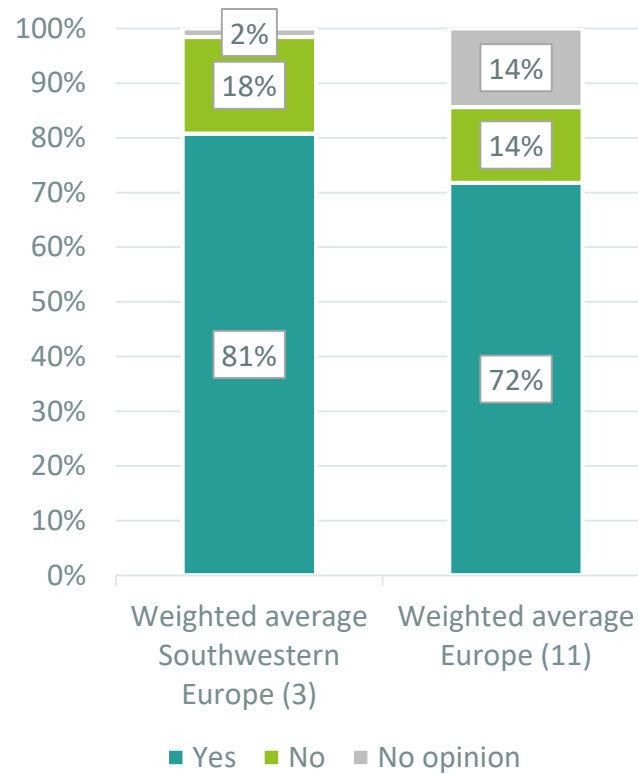
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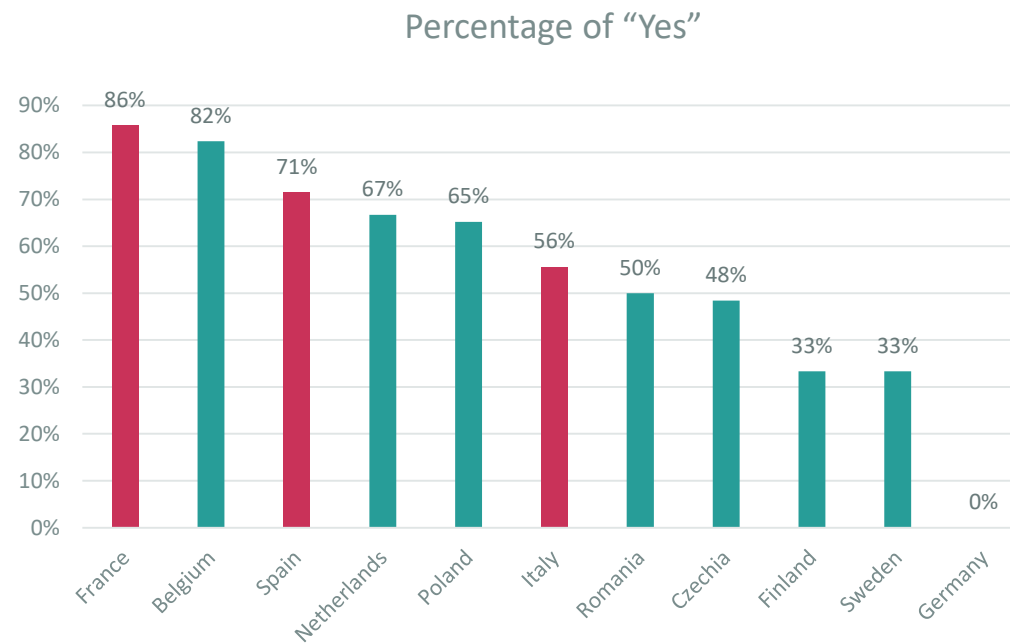
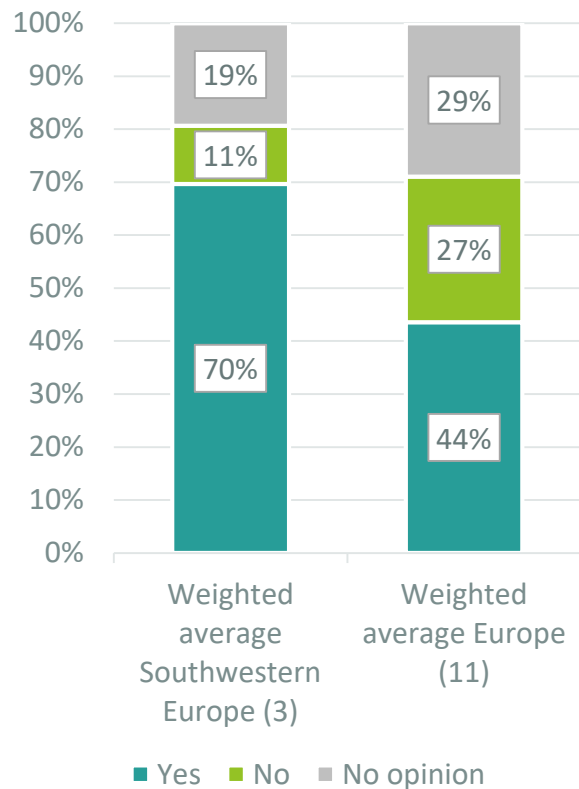
Does digitalisation create qualified jobs in service activities especially new service jobs linked to the industry?



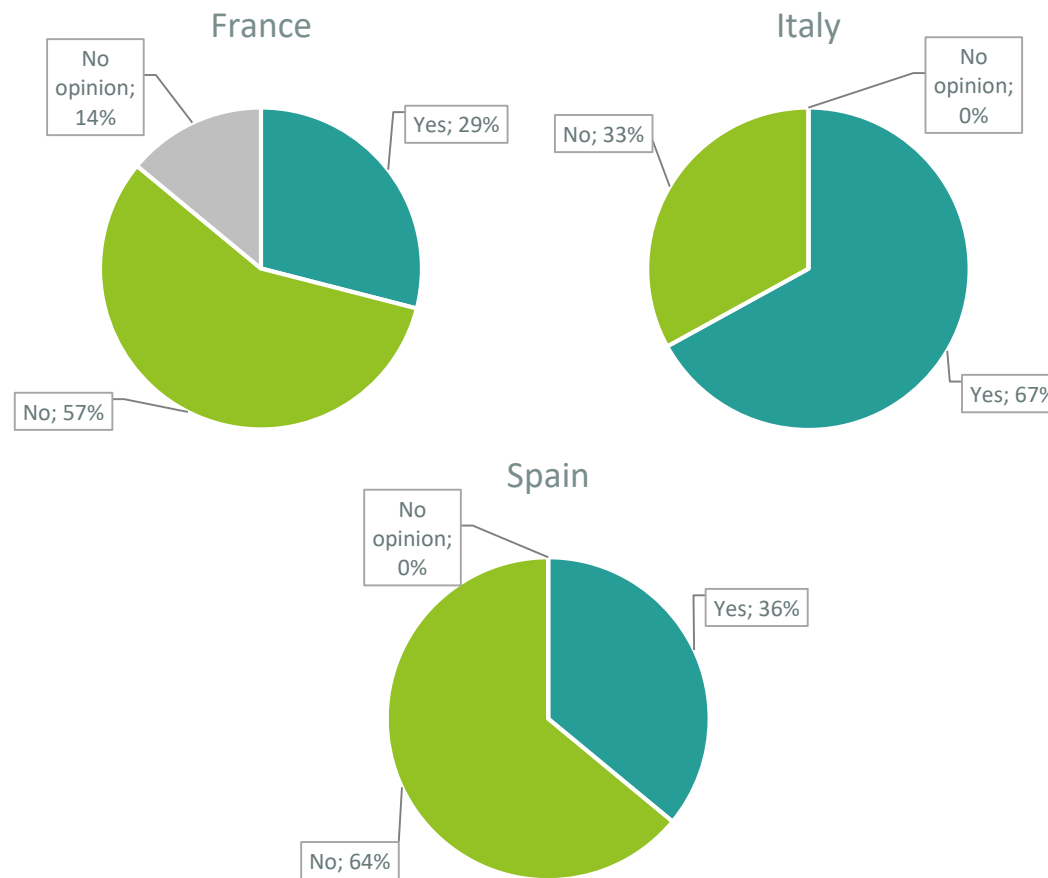
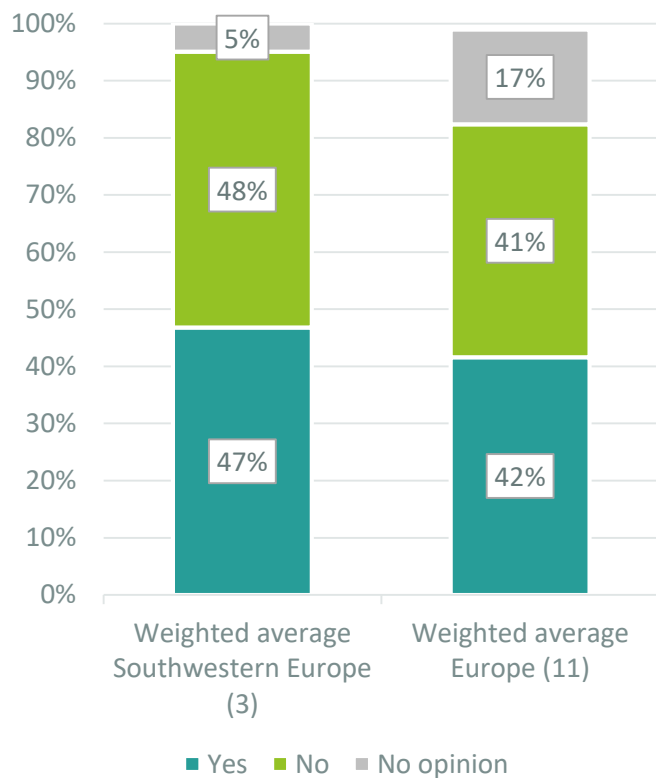
By relying on digital technologies, is the industry increasingly outsourcing some activities, especially services?



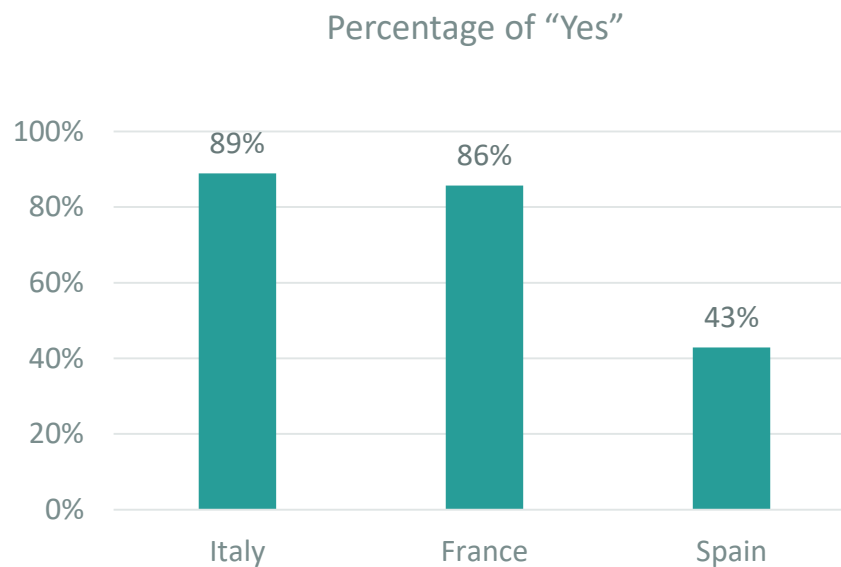
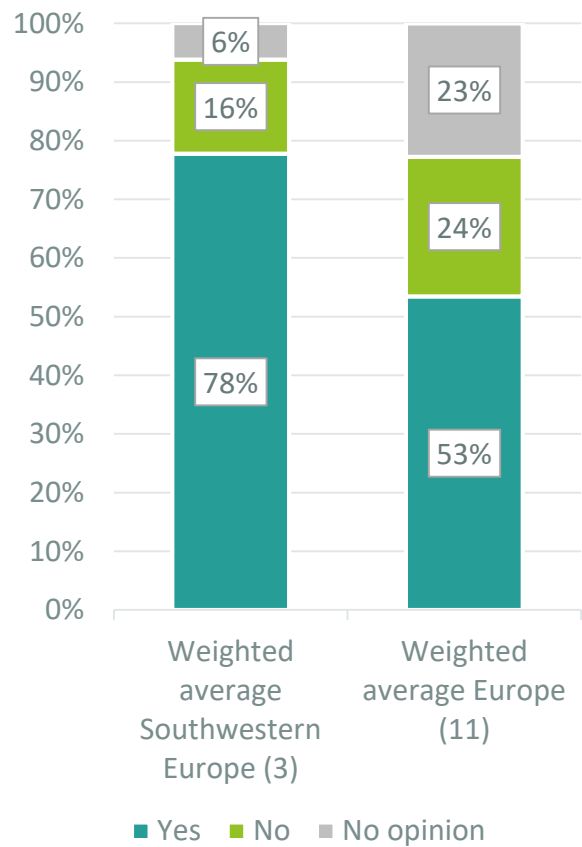
Does digitalisation marginalise older employees with many years of service?



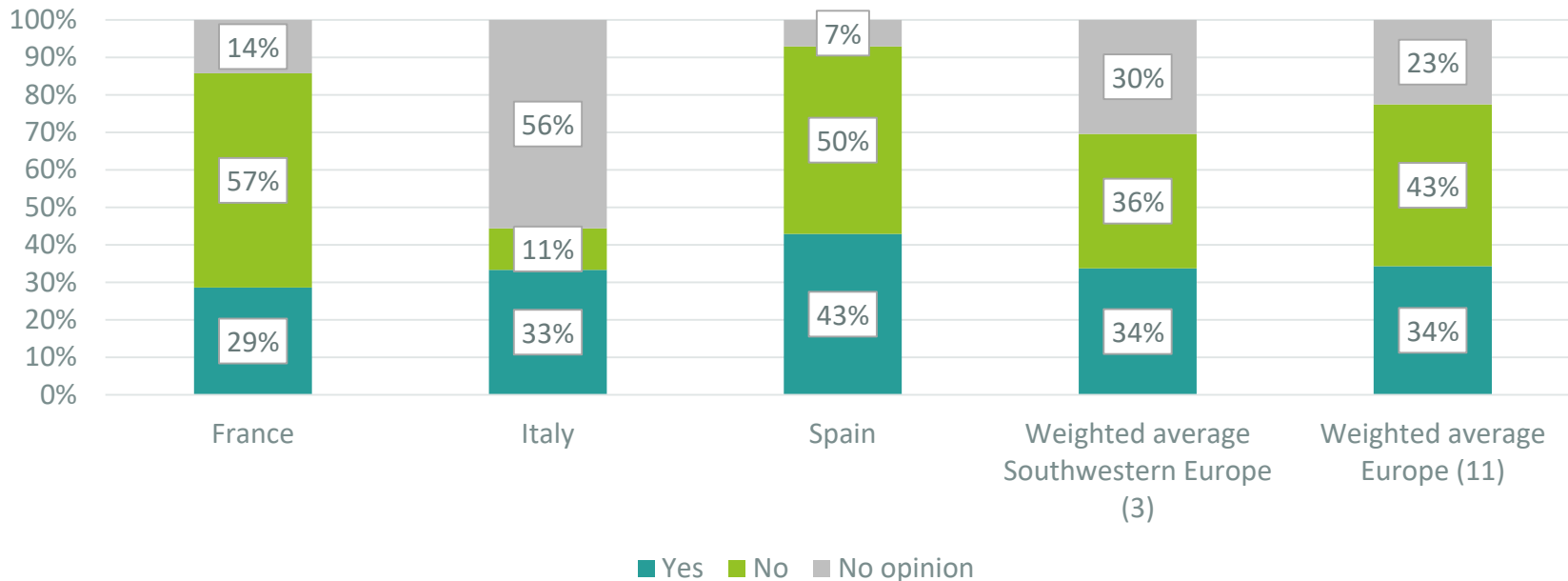
Does digitalisation encourage staff turnover with the aim of rejuvenating the labour force?



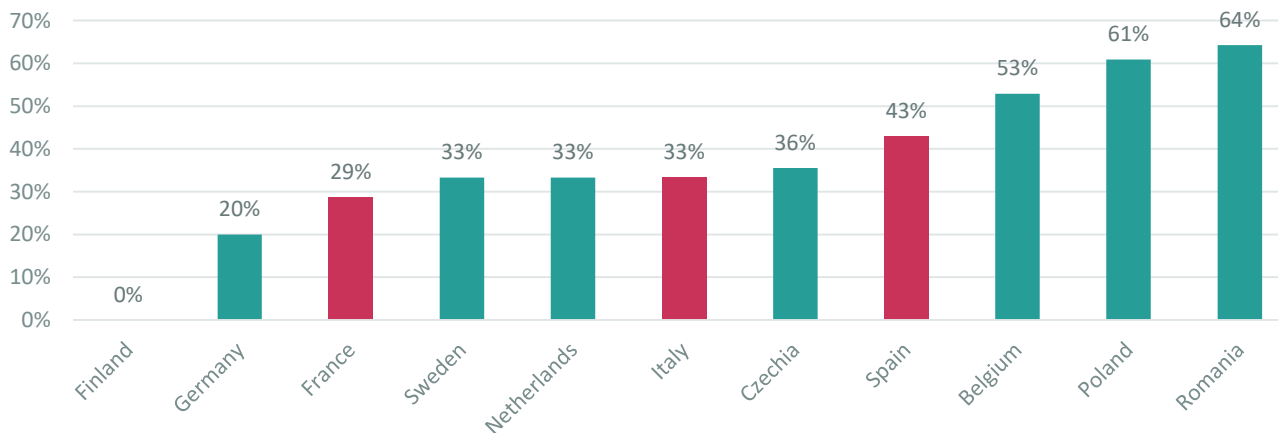
...and paradoxically, does it require more flexible working hours?



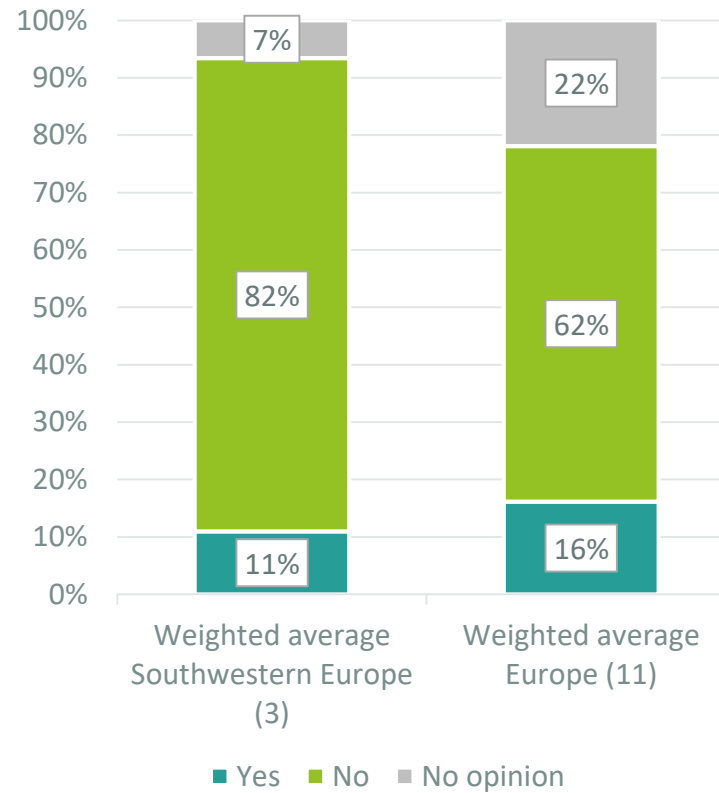
Does digitalisation mean that the operator becomes more accountable and autonomous?



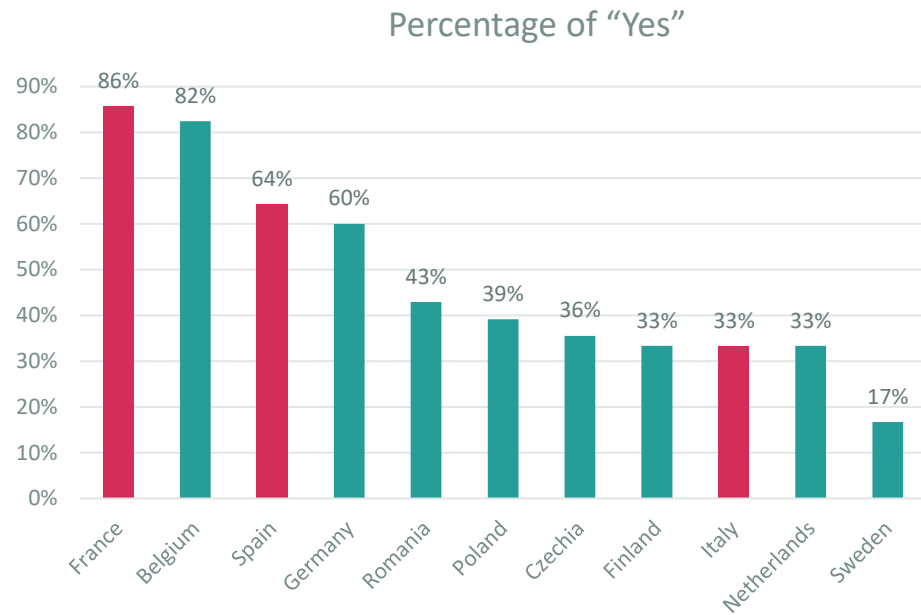
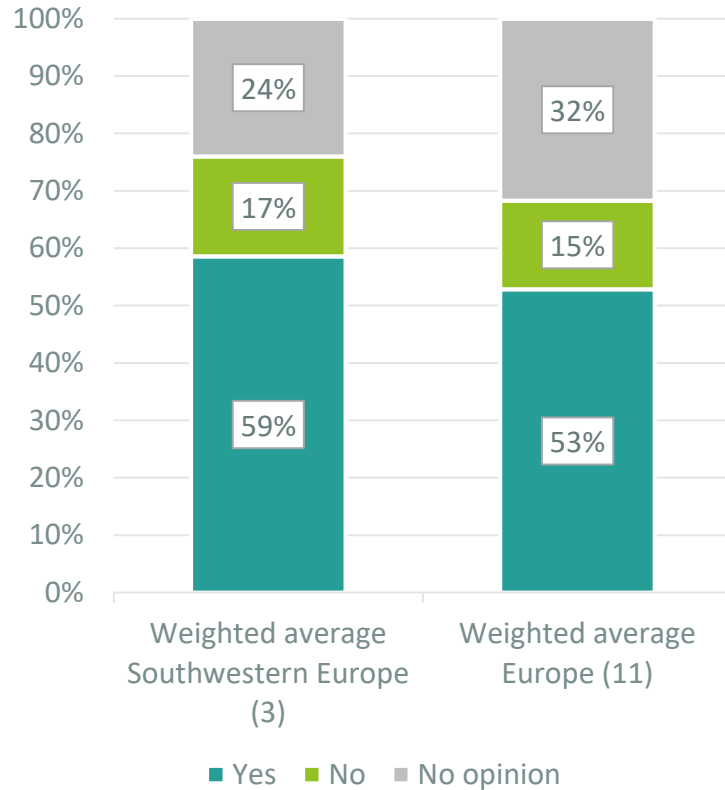
Percentage of "Yes"



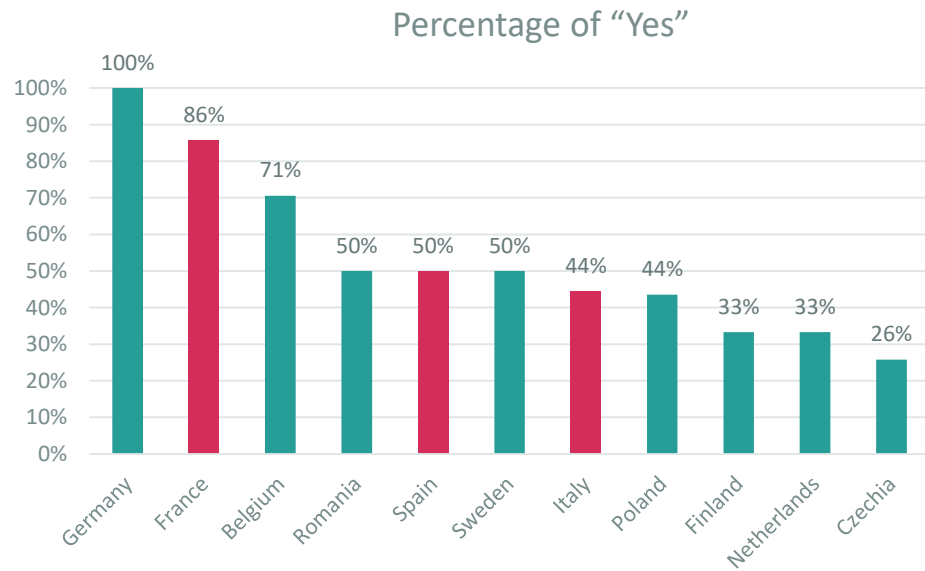
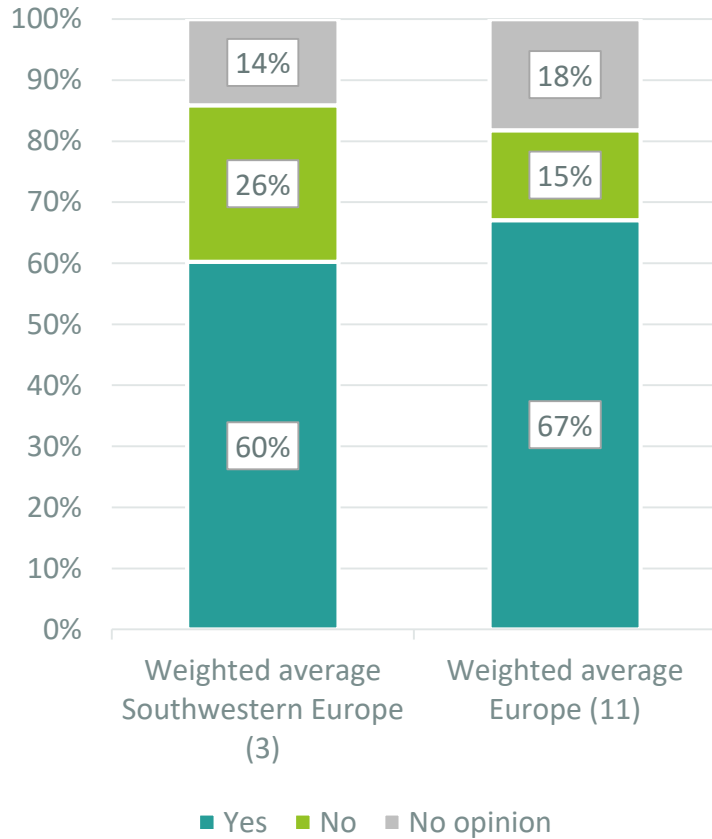
Does digitalization mean employees become deskilled?



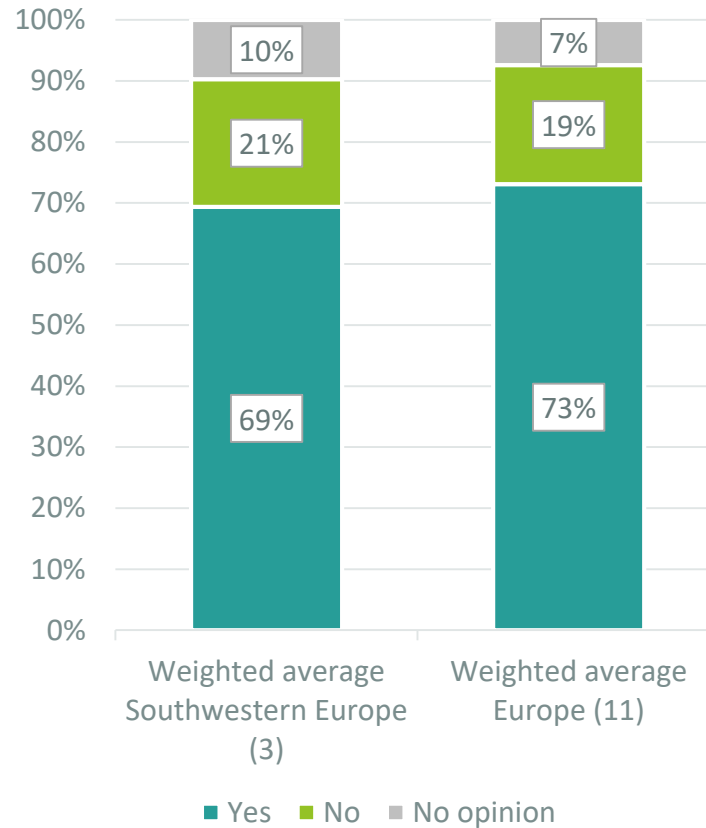
Does digitalisation increases employee stress and is it the cause of cognitive overload?



Digitalisation encourages the emergence of new forms of non-salaried subcontracting work:
joint contracting, crowdworking, auto-entrepreneurship



Does digitalisation modify the decision-making process within companies?



Is digitalisation a source of competitiveness (cost, deadline) because it results in productivity gains?

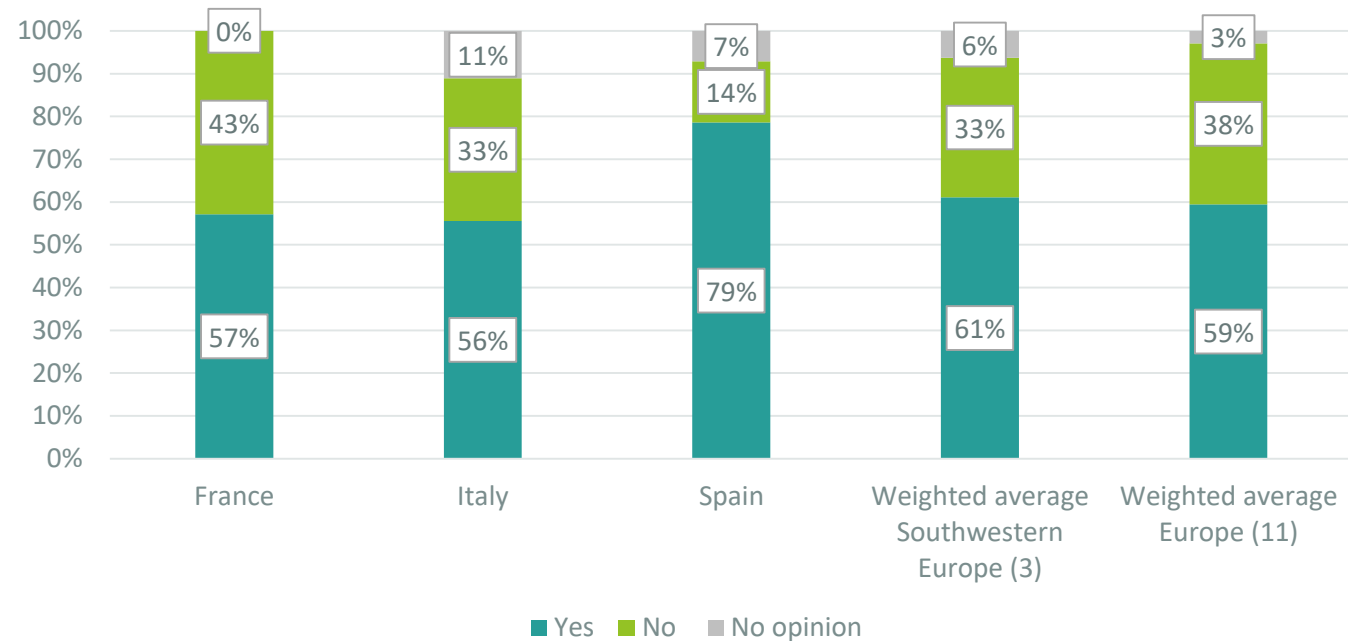


Part 2

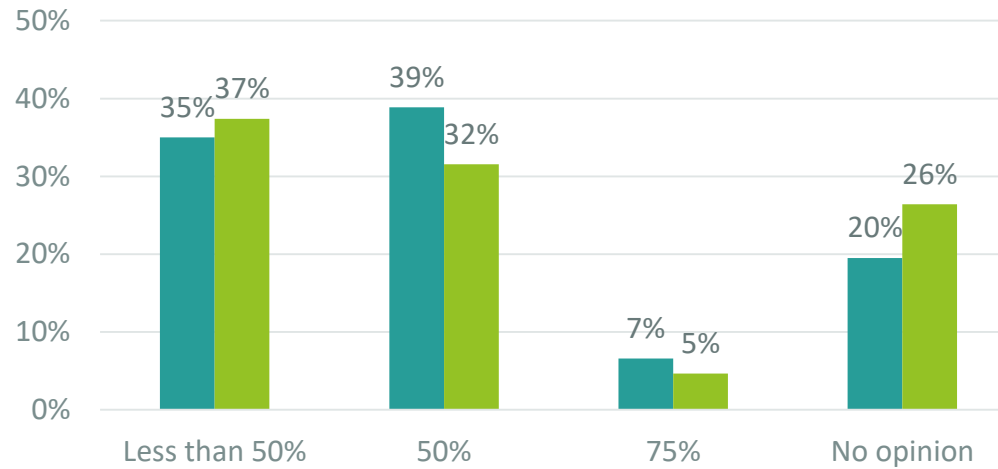
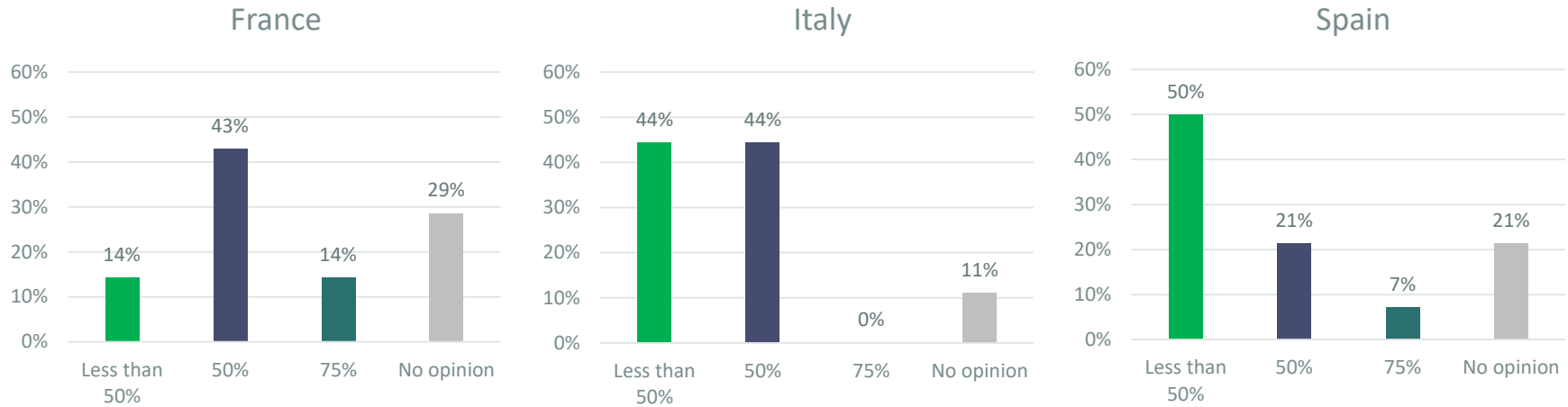
DIGITALISATION OF THE INDUSTRY – ASSESSMENT IN YOUR SECTOR

59% respondents at EU level (11) consider that robots are carrying out manual production tasks and 61% respondents at Southwestern Europe level agree that robots are carrying out manual production tasks.

Are robots already carrying out manual production tasks?



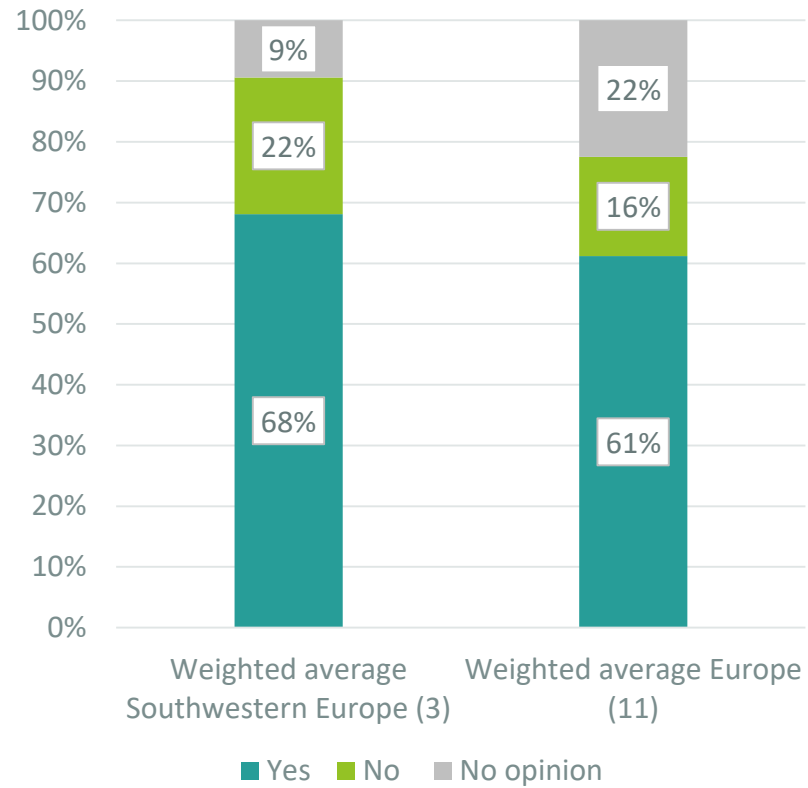
In what proportion are production operations carried out by robots?



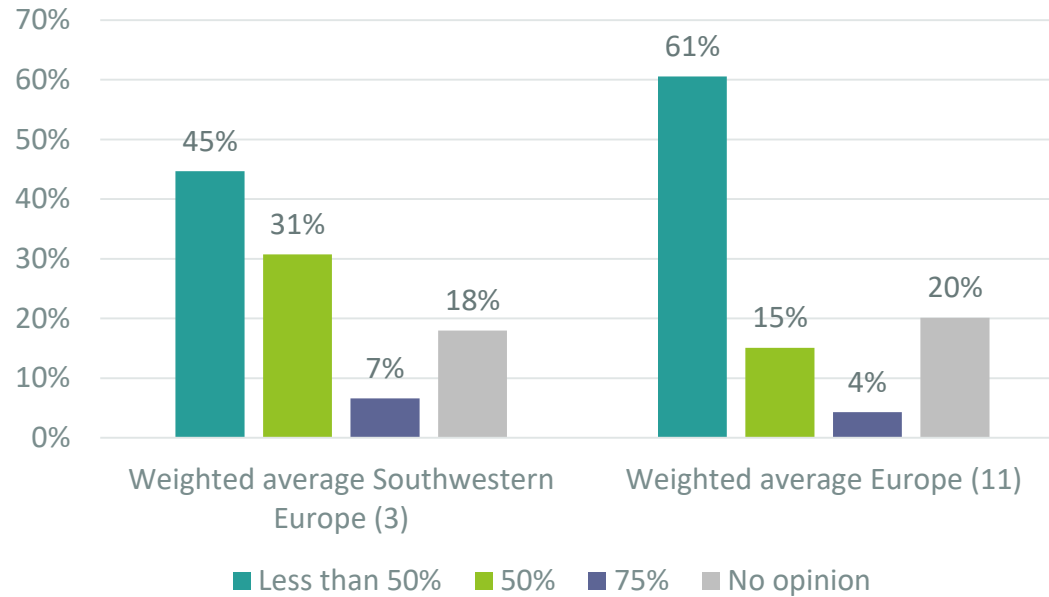
- Weighted average Southwestern Europe (3)
- Weighted average Europe (11)



Could tedious or dangerous tasks be carried out by robots in the near future?

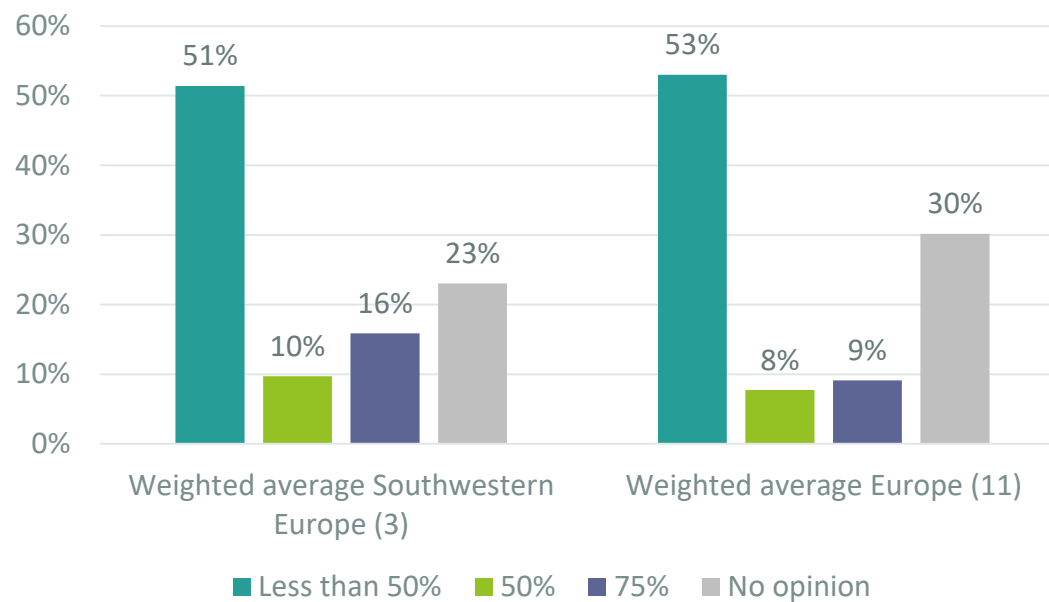


Machines and lines are inter-connected for connected and adaptable factories at the customer's request, and are therefore agile



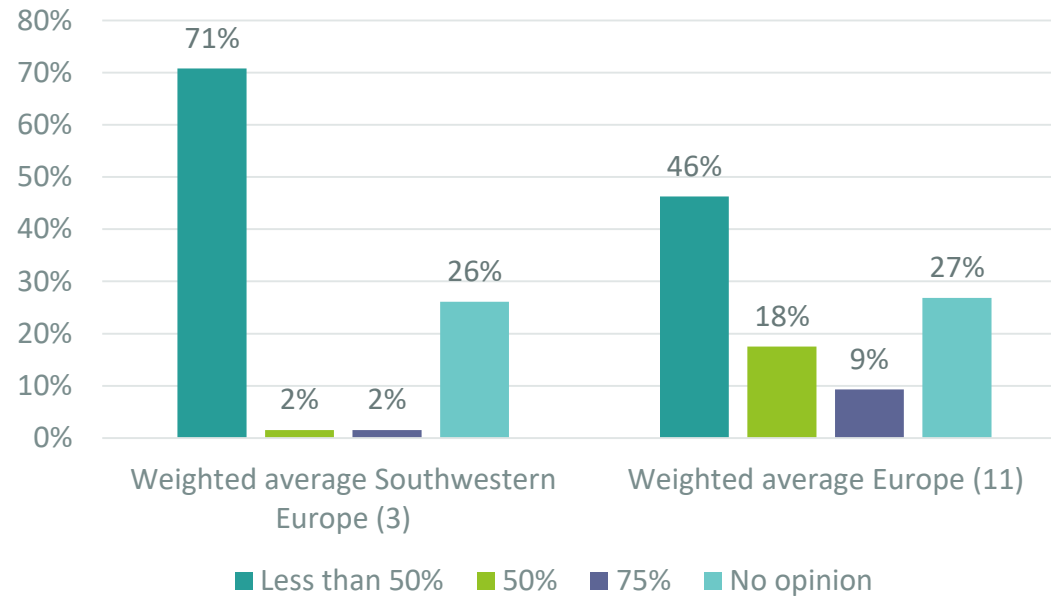
	Less than 50%	50%	75%	No opinion
Spain	71%	7%	7%	14%
France	29%	29%	14%	29%
Italy	44%	44%	0%	11%

With connected objects it is possible to control transport conditions and product use?



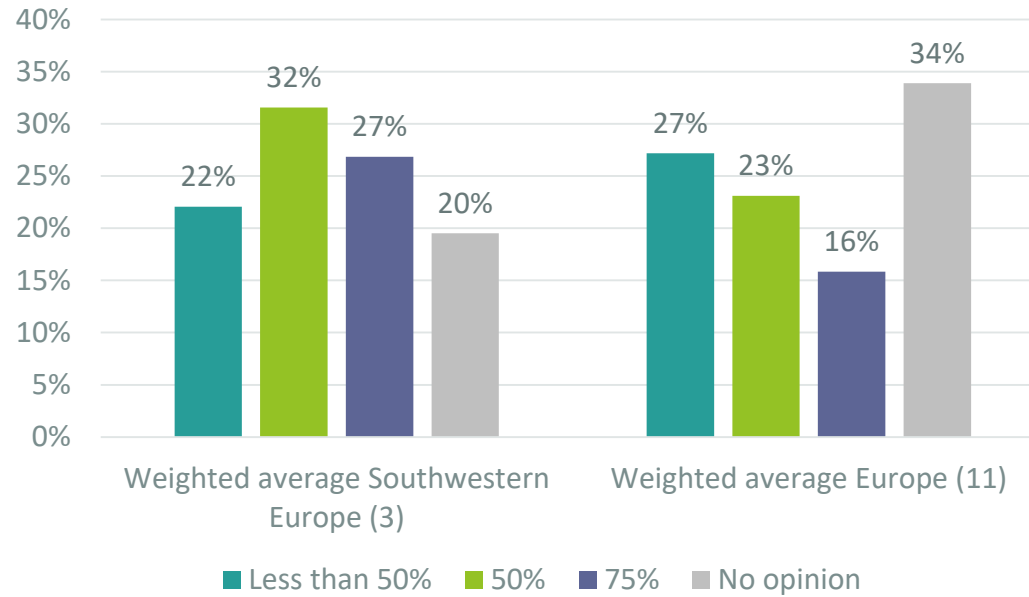
	Less than 50%	50%	75%	No opinion
Spain	57%	21%	7%	14%
France	43%	14%	0%	43%
Italy	56%	0%	33%	11%

Are there additive manufacturing facilities for individualised production, testing and developing new products, prototyping or developing new materials?



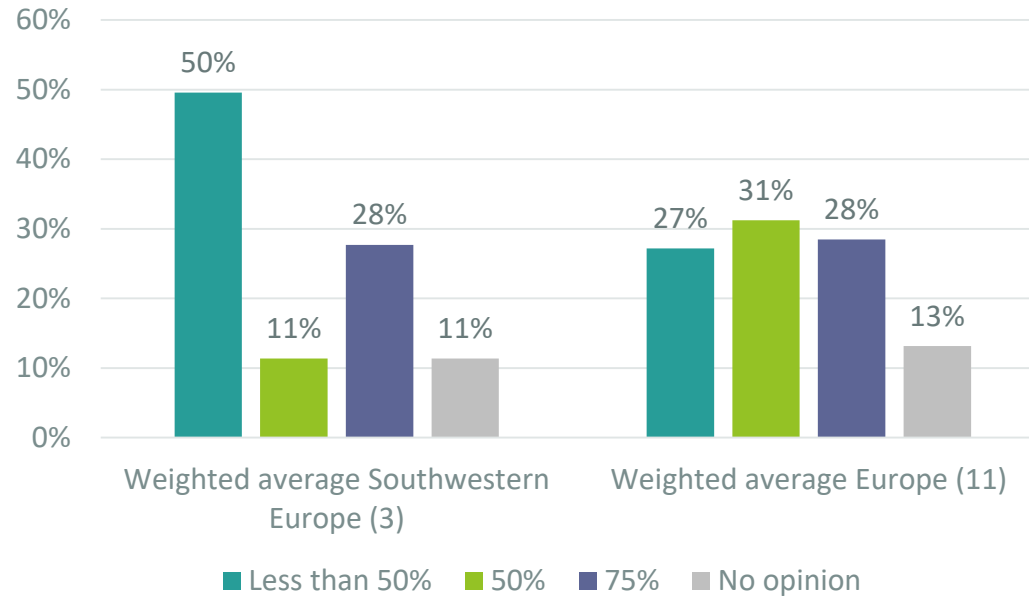
	Less than 50%	50%	75%	No opinion
Spain	57%	7%	7%	29%
France	57%	0%	0%	43%
Italy	89%	0%	0%	11%

The existence of databases that are used to optimise the production process, improve logistics and storage operations, enable predictive manufacturing or help the sales department?



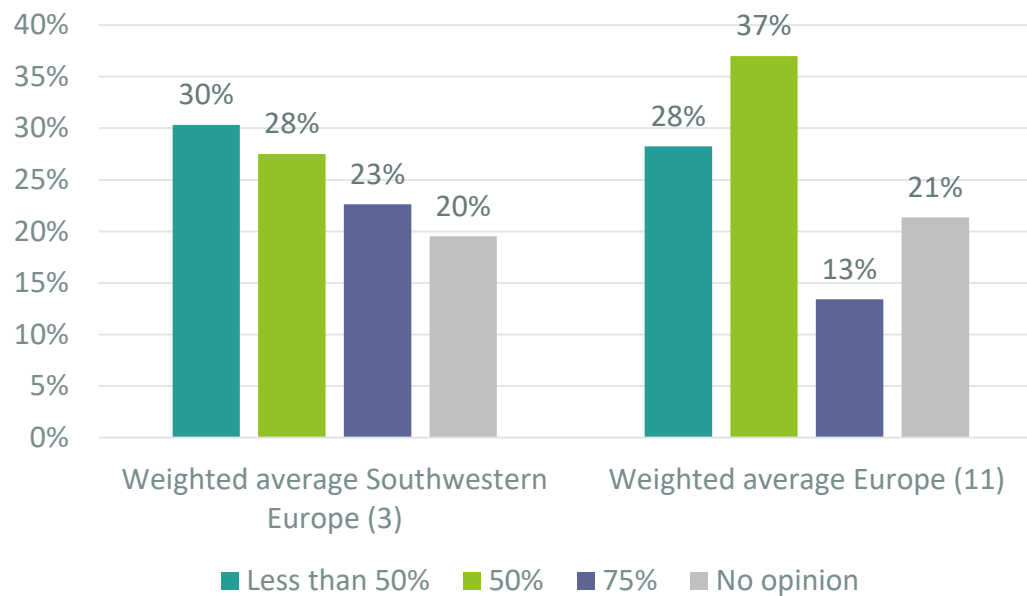
	Less than 50%	50%	75%	No opinion
Spain	36%	7%	36%	21%
France	0%	71%	0%	29%
Italy	33%	11%	44%	11%

Are there digital platforms such as Sharepoint that improve and strengthen collaboration and cooperation within the company?



	Less than 50%	50%	75%	No opinion
Spain	50%	7%	36%	7%
France	29%	14%	43%	14%
Italy	67%	11%	11%	11%

Are there integrated platforms that exchange information automatically between the different services functions that are internal or external to the company?

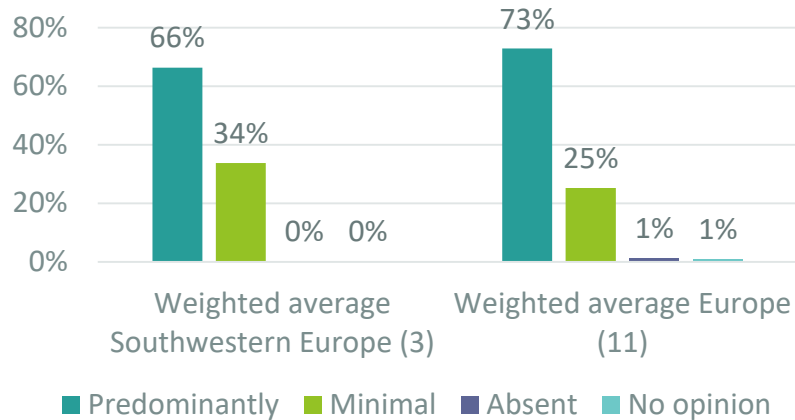


	Less than 50%	50%	75%	No opinion
Spain	29%	14%	36%	21%
France	14%	29%	29%	29%
Italy	44%	33%	11%	11%

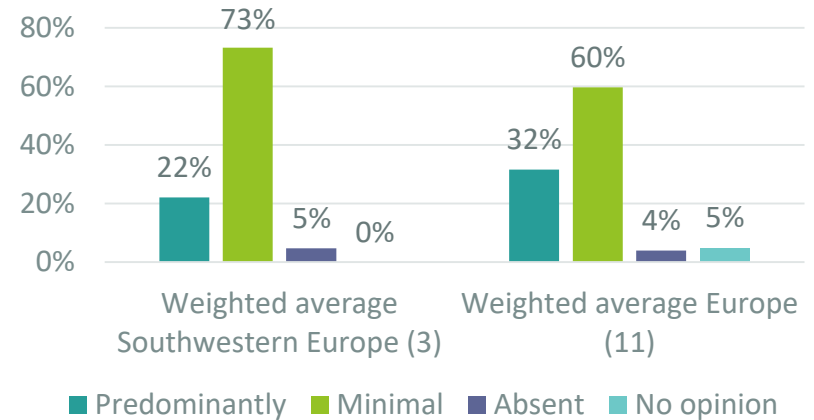


With respect to digitalisation, how do you assess the technical skills of employees in the industry?

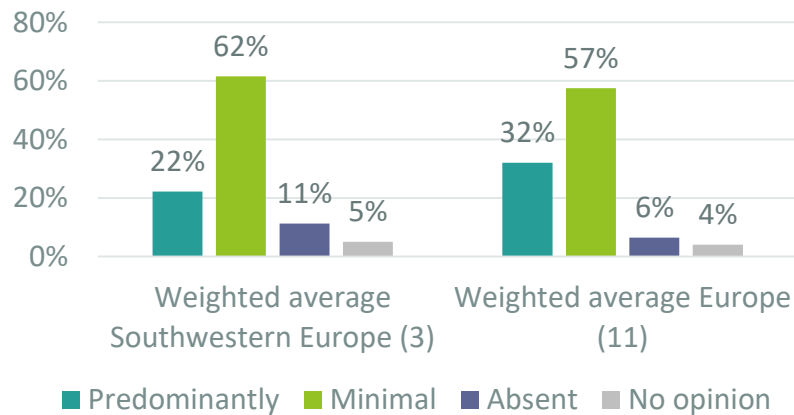
Use of IT tools



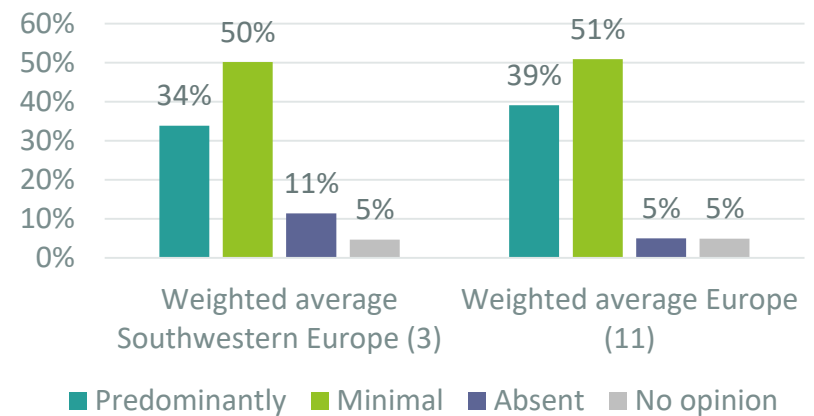
Skills for analysing a large quantity of different types of data (big data analysis)



Programming skills (e.g. developing and implementing digital assistance systems)



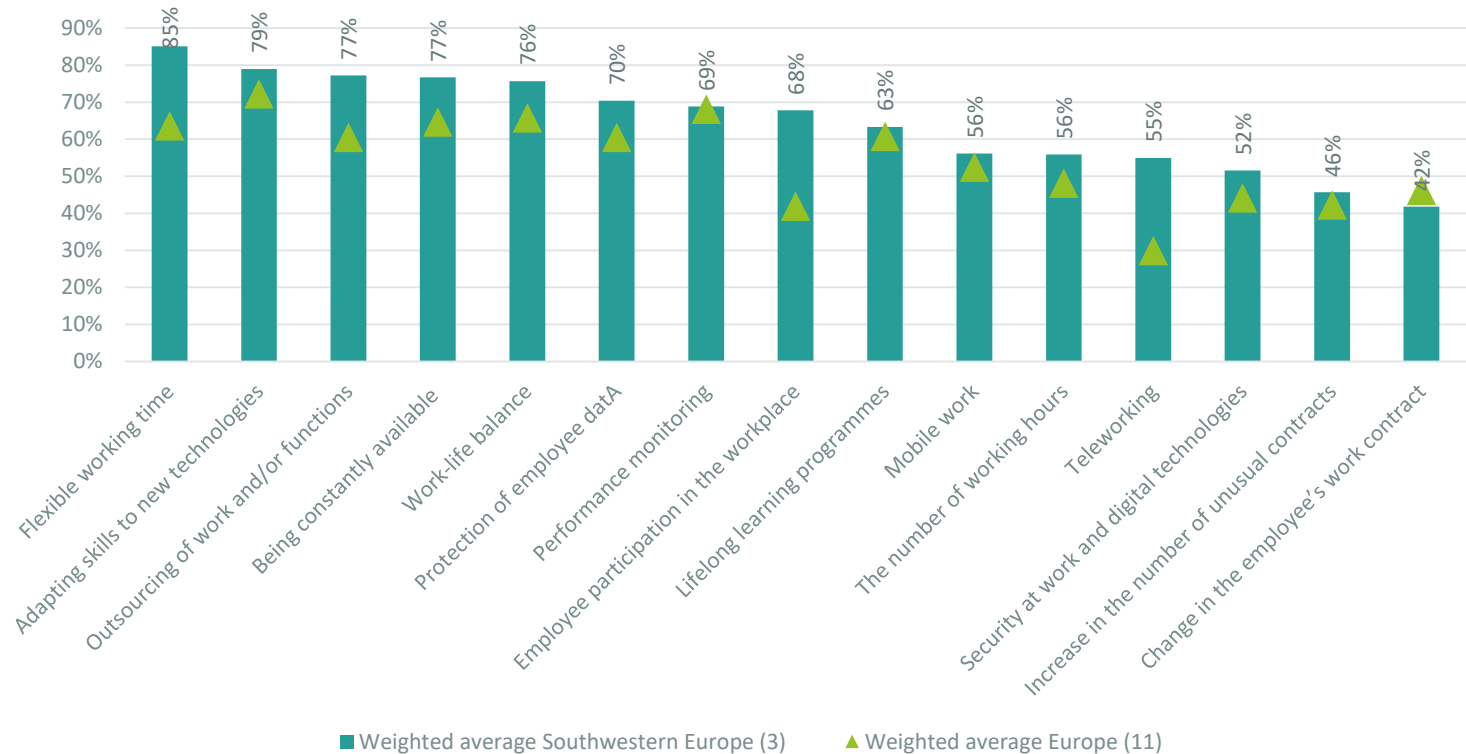
Data and communication security skills



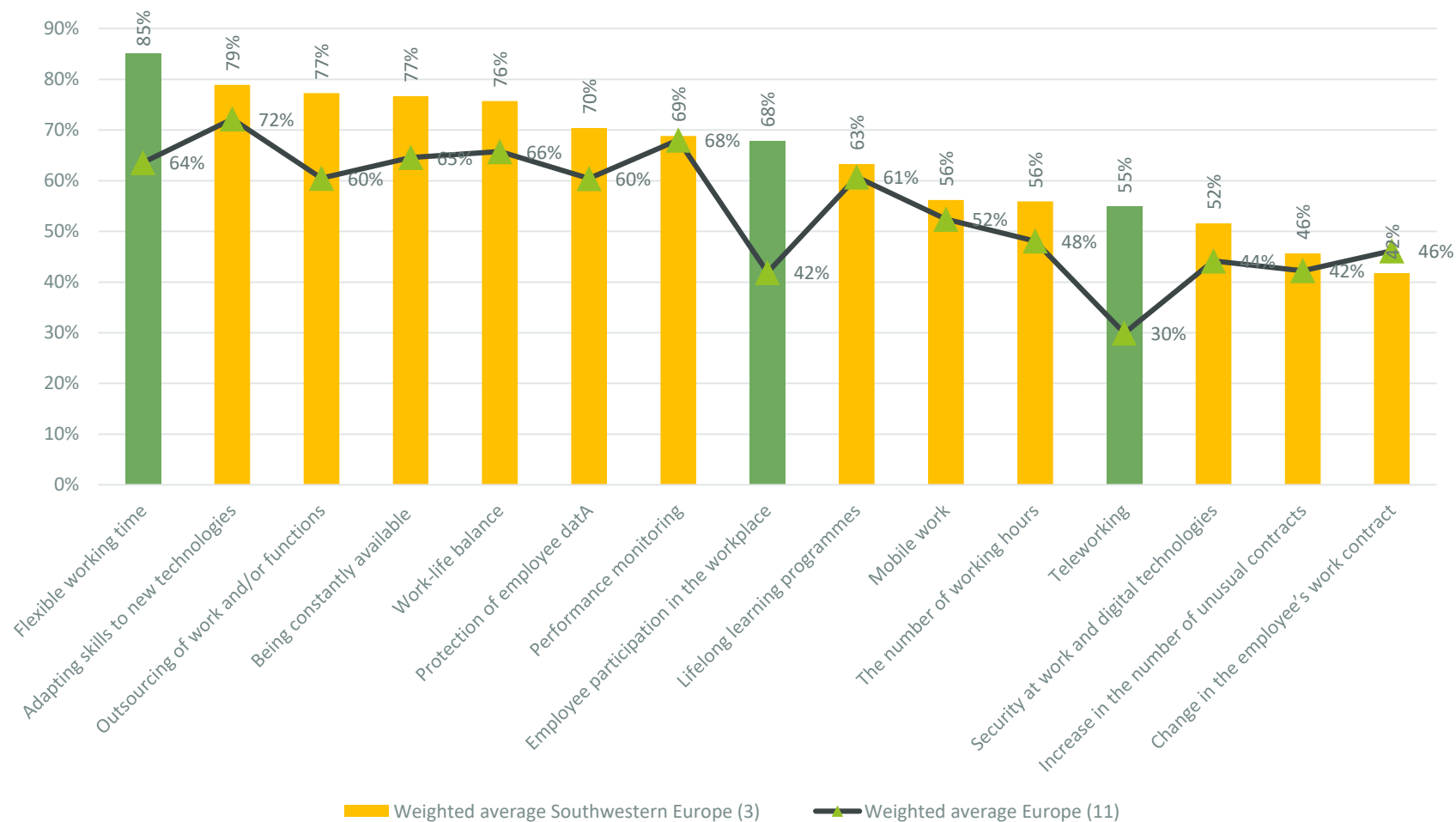
Part 3

SOCIAL DIALOGUE IN THE COMPANY AND WITHIN THE BRANCH

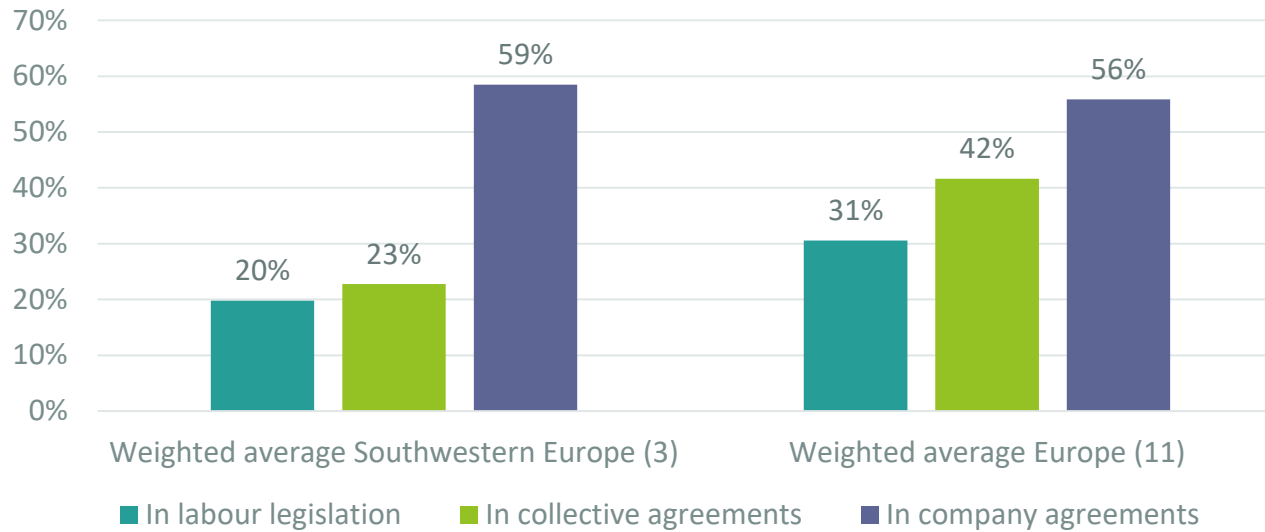
What are the main concerns of the employees and trade union in the face of the digitalisation?



WHAT ARE THE MAIN CONCERNS OF THE EMPLOYEES AND TRADE UNION IN THE FACE OF THE DIGITALISATION?



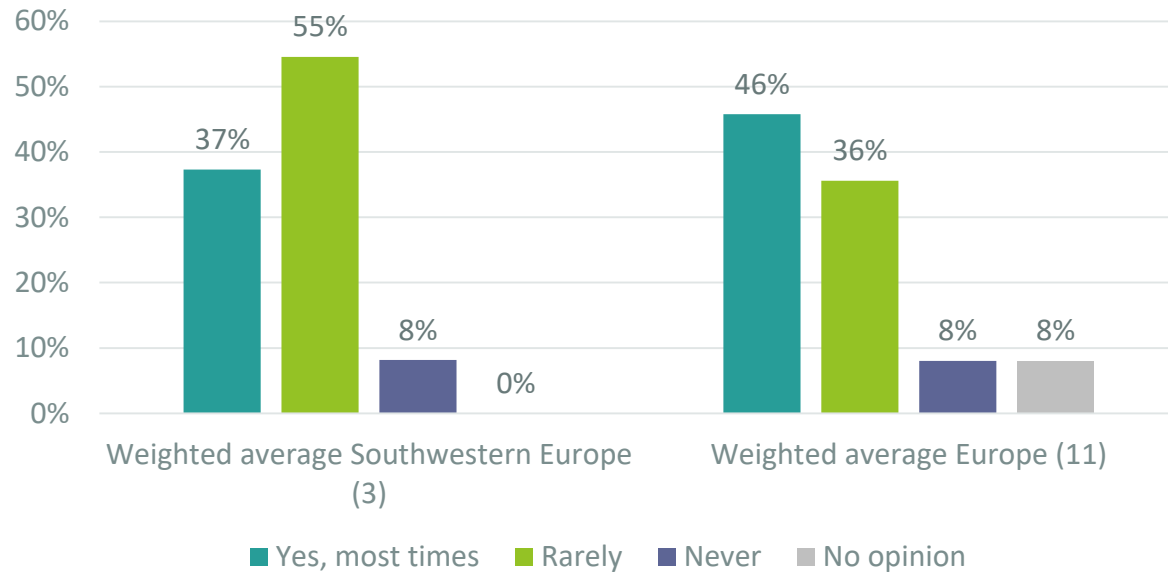
Has digital transformation been taken into account in the last 5 years?



Very different situation by country:

	In labour legislation	In collective agreements	In company agreements
Spain	21%	14%	21%
France	43%	29%	71%
Italy	0%	22%	67%

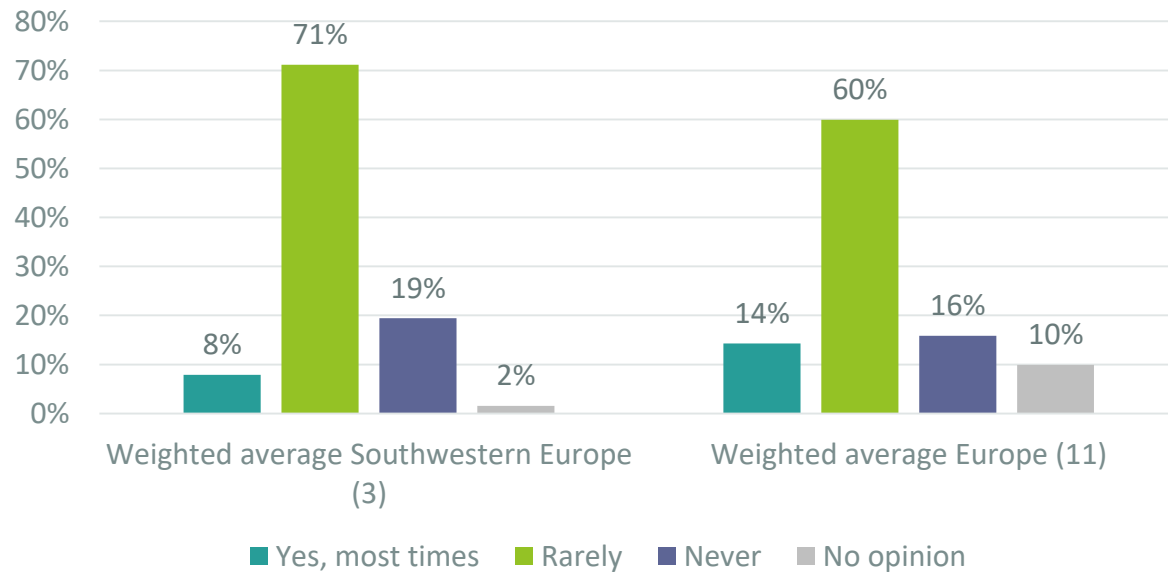
Does management or the employers' organisation present information on digitalisation to trade unions and works councils, according to the type of activity or workshop?



	Yes, most times	Rarely	Never
Spain	14%	71%	14%
France	43%	43%	14%
Italy	44%	56%	0%



Does the company or the employer's organisation provide information regularly regarding the cost and gains from digital modernisation?

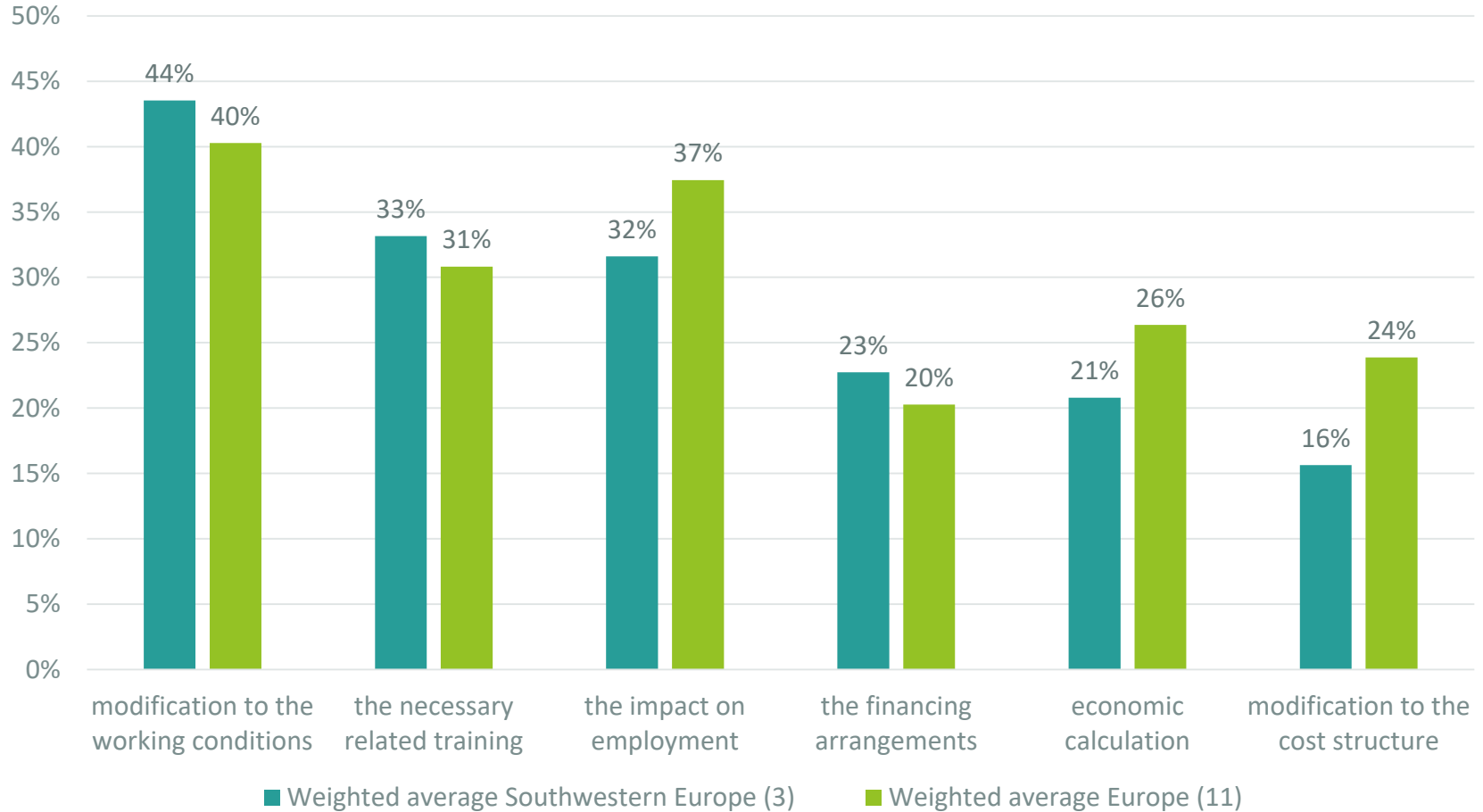


	Yes, most times	Rarely	Never	No opinion
Spain	14%	36%	43%	7%
France	0%	71%	29%	0%
Italy	11%	89%	0%	0%

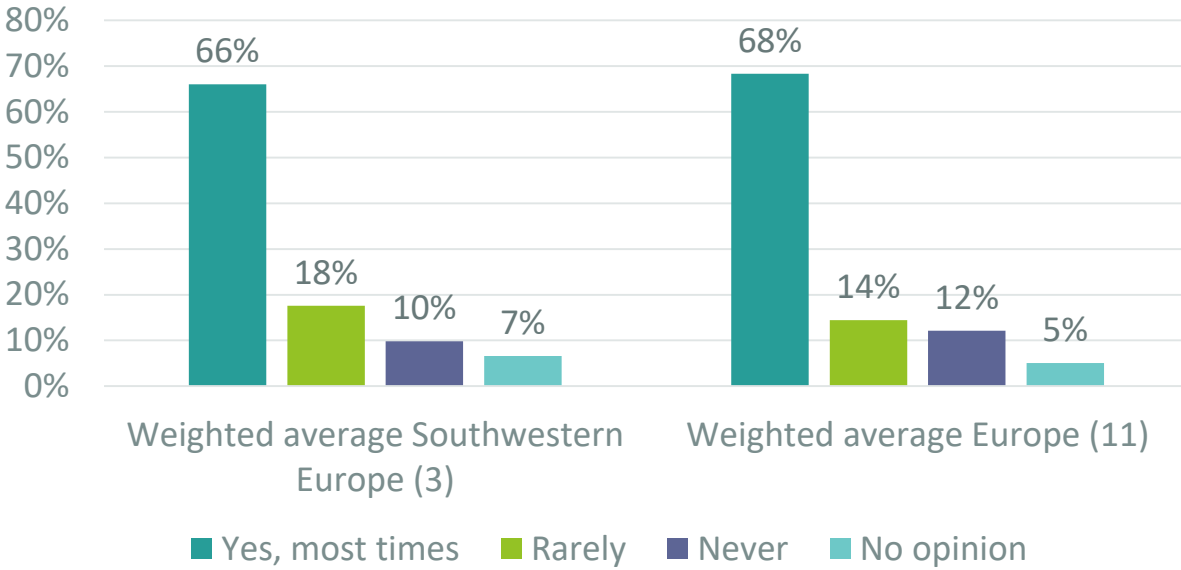


Are digital investments subject to a specific information process in terms of:

Answers „Yes, most times”



Do employee representatives ask that the consequences of the companies' digitalisation and its impact on jobs be anticipated?



	Yes, most times	Rarely	Never	No opinion
Spain	57%	36%	0%	7%
France	57%	14%	14%	14%
Italy	78%	11%	11%	0%

