Global Trade Management Study from AEB and DHBW

Agile Future - How Agile Project Management Is Transforming Global Trade and Logistics





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Agile project management in global trade and logistics

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Executive summary

More and more businesses are turning to agile project management – regarded by many consultants as the solution for ensuring competitiveness in a highly complex, volatile global economy. But the differences between agile and traditional project management are significant, and this means major changes for everyone involved.

Agile project management involves the iterative planning and management of projects, with self-organized teams taking a dynamic and flexible approach. This means that the overall scope of the eventual solution is not yet fleshed out in detail when the project begins. Instead, the team approaches the project objective in various sprints, delivering usable results in short cycles.

But have agile methods also taken root in global trade and logistics? What has been the experience of companies in these fields? Are clear paths to success already mapped out? Answers can be found in this survey of 155 experts. What we see is that in global trade and logistics today, the concept of agility carries high expectations despite scarce empirical data.

Current challenges in global trade and logistics

Globalization, volatile markets, emerging protectionism, growing competition, and price wars: The conditions under which businesses must implement global trade and logistics projects are difficult. This lends urgency to efforts by companies in all industries to achieve maximum flexibility in how they implement their projects.

Future of project management is agile

Most companies are convinced that agile project management is one potential answer to current challenges. A large majority of those surveyed (64%) still use traditional project management in global trade and logistics projects, but two-thirds expect agile methods to replace this approach in the future. An overwhelming majority of businesses (84%) already see an agile approach as a clear competitive advantage – and interestingly, this even includes those who are not (yet) planning any agile projects. Respondents see a potential for agile project management primarily in projects with new or undefined parameters or with a high level of overall complexity, such as those involving international players.

Agile projects: Efficient. Fast. Affordable?

Respondents credit agile project management with delivering more efficient processes (87%), faster

implementation (86%), and better results (79%). The experts also attribute cost benefits to agile project management, with 60% seeing lower project costs as likely. A gap emerges here between expectations and experience, however: Among experienced users, 62% expect agile project management to bring about lower project costs. Those currently planning agile projects have much higher expectations, however, with 79% counting on potential cost savings.

Major opportunities for greater employee motivation

Most experts (83%) believe that the use of agile methodologies heightens employee motivation. "This experience aligns with the basic principle of self-organizing teams in agile projects," notes Dr. Dirk Hartel, Director of Studies for the Department of Business Administration Service Management at Baden-Württemberg Cooperative State University in Stuttgart and co-author of the study. "You can take it for granted that greater freedom heightens the sense of responsibility and motivation of individual team members." The self-discipline of the project team plays a critical role here, however, with 57% of respondents calling it important for the success of agile approaches.

Limits of agile project management

The greater freedom that agile project management brings is not exclusively positive, however: One-third of experts fear that discipline will suffer over the long term as a result. "Combatting this risk is where the choice of team members really comes into play," explains Dr. Ulrich Lison, member of the Executive Board of AEB and the study's other co-author. "It's also important to train employees appropriately in the methodology."

The concerns are much greater when it comes to staying within cost parameters, with 56% seeing a budget overrun as likely. Nearly as many see risks in a greater need for coordination (54%) and inadequate project documentation (51%).

Generally speaking, participants in the study do not see agile methods as appropriate for every project. In projects that are very deadline-sensitive, for example, 45% of respondents are more comfortable with traditional methods, and only 29% prefer taking an agile approach. And in projects with many people involved, 50% of experts turn to traditional project management while only 27% favor an agile approach.

Agile project management in practice: little experience and lack of expertise

Although most businesses believe agile project management offers a competitive advantage in global trade and logistics,

only about 36% of all respondents are already running agile projects. One-fifth are currently planning to introduce agile methodologies, while 44% – predominantly from businesses with fewer than 2,000 employees – report no such plans. The reason cited by most is not that they see no potential here, it's mostly a lack of expertise and the absence of standards. "We expect this gap to close in the coming years through the targeted training of high potentials," says Professor Hartel. "But professional associations should also step up and take more responsibility for supporting smaller businesses in introducing agile methods and implementing agile projects." Businesses with more than 2,000 employees have much more experience with agile projects.

Customer expectations are generally the strongest force behind the implementation of agile project management. The issue is usually driven internally at the company management or departmental level.

Self-organized teams are most commonly used agile method

The self-organized team ranks number one (57%) among the main agile practices actually used. "It's a safe bet that this agile principle will continue to grow in importance moving forward," Lison adds. "That's because Generation Y is especially attracted to the kind of work that requires personal initiative. Companies that use agile project management could turn this into an advantage in the competition for workplace talent."

Other agile methodologies commonly used in global trade and logistics include task boards (42%), planning and review meetings (40%), and daily standup meetings (37%).

Agile project management is about habits and mindset

The study also makes it clear, however, that methodologies alone are not responsible for ensuring the success of agile projects. The single most important factor is a corporate culture that encourages an agile approach (74%) and managers who support their teams in implementing this (61%). "What we need here is a new awareness that permeates the entire company," explains Lison. "Agile project management can only work hand in hand with a modern approach to management."

When it comes to ensuring the quality of agile projects, the experts rank employee training first (48%), followed by the introduction of agile standards (42%). It's also true that the

more experience a company has with agile methods, the greater the satisfaction with both the process and results of agile projects.

What businesses can do

The following six business practice recommendations are based on the findings of the study:

- Get on board: Agile project management offers a significant competitive edge one that even smaller companies should seize.
- Look at your corporate and leadership culture: To successfully introduce and deploy agile project management, you need an open corporate culture and modern management philosophy. Check whether your company has what it takes.
- Start small: Many companies recognize the opportunities in the agile management of global trade and logistics projects but don't know where to start. It's possible to gradually introduce agile project management, then expand your "toolbox" bit by bit.
- **Define standards:** : Here, it is especially important to build a common understanding and define clear parameters to prevent resource allocation from getting out of hand.
- **Train employees:** This is a key factor in the success of agile projects. The aim is to internalize methodologies and principles. This helps you maximize the benefit and understand the potential risks so you can avoid missteps.
- **Put together the right team:** Self-organized working demands a lot of discipline, personal initiative, and vision. Finding the right people for the project team is critical.

of respondents believe agile project management in global trade and logistics will deliver

.8/

a competitive advantage

Benefits of	More efficiency	87.2
agile project	Faster implementation	85.6
management	Greater employee motivation	83.4

Key success factors for implementing agile projects (in percent)

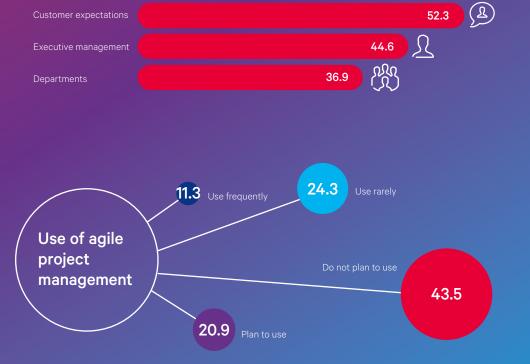








What drives agile approaches in the companies?



Why companies do not use agile project management



Agility as a trending issue – an opportunity for global trade and logistics?

1.1 Background

"We need to become agile." If you follow the advice of management consultants and the endless stream of media reports on the topic, this is the only acceptable answer for companies that wish to protect their long-term competitiveness in a highly complex and increasingly volatile economic environment. Traditional project management, so the thinking goes, is no longer up to the task of responding with speed and flexibility to unforeseen developments and the capricious demands of customers.

The term "agility" is not new, however: It's been a prominent theme in project management for over 15 years now. Its roots lie in software development, where creative process drivers are compelled to accommodate the dizzying pace of innovation. The term "agile project management" was popularized through the "Agile Manifesto" signed by seventeen developers in 2001, which compares and contrasts the key attributes of agility relative to traditional methods:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan¹

Other than this manifesto, there is no generally accepted definition of agile project management. There are, however, a few principles that most people identify when attempting a definition: self-organized and highly autonomous teams, an absence of strict objectives in favor of flexible specifications that evolve as circumstances change, close collaboration and coordination with

Agile approach no longer for software alone

Various studies suggest that agile methodologies are gaining more and more ground in the business world, even outside software development.² The conventional wisdom is that agile teams are not only quicker – they're also more successful. Those who wish to run agile projects can now choose from a whole range of specialized methods and tools, such as scrum or kanban.

Today, global trade and logistics are also held to a higher standard of flexibility, cost-efficiency, and customer focus. Agile might be the right approach here to efficiently and successfully master dynamic developments and complex projects. The latest study from AEB GmbH and Baden-Württemberg Cooperative State University (DHBW) in Stuttgart asked global trade and logistics experts how they see the potential of agile approaches and what their experience has been so far.

¹ See http://agilemanifesto.org.

² See, for example, the BPM Laboratory at Koblenz University of Applied Sciences: Status Quo Agile 2016/2017, study conducted in collaboration with www.scrum.org and GPM – German Association for Project Management, www.status-guo-agile.de.

1.2 Working definition

The questionnaire for this study began by introducing the following key attributes of "agile project management" so

that respondents would have a uniform definition of the concept:



1.3 General assessment: the future will be agile

Experts see agility as more than just the latest buzzword, because agile approaches in global trade and logistics offer companies tangible competitive advantages. An overwhelming majority of some 84% agree with this statement (see Fig. 1), and a full 36% "completely agree." Two-thirds believe that agile methodologies will eventually replace traditional project

management. Only a few respondents "completely disagree," while another 30% consider the issue to be generally "overrated." The results show that people now have generally high expectations for agile project management in global trade and logistics as well and recognize its potential.

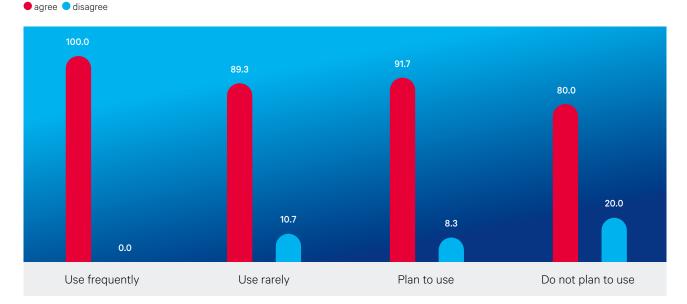
"Agile project	is a competitive advantage	83.8
management in global	will replace traditional methods	65.8
trade and logistics"	is overrated	30.3
	is just a passing fad	22.5

Figure 1: Less than one-third of respondents feel that agile project management is overrated (in percent)

Users feel certain: agile project management gives a competitive edge

Those who have already had a lot of experience with agile projects rate this type of approach much more positively than others. All "frequent users" see a clear competitive advantage in using agile project management in global trade and logistics (see Fig. 2). Those who only seldom use and those who are planning to use agile project management are more cautious in their judgment (89% and 92% respectively). Interestingly, even those who currently choose not to use agile project management believe overwhelmingly that they are missing out on a competitive advantage (80%).

Those who are satisfied with the process of their agile projects consider it to be a competitive advantage (see Fig. 3). Interestingly, the level of satisfaction with the results of the agile projects does not have any effect on this assessment. However, those who are generally dissatisfied with the prcess see agile project management more often as overrated.



"Agile project management in global trade and logistics is a competitive advantage"

Figure 2: Users see clear competitive advantage in agile project management (in percent)

"Agile project management in global trade and logistics ..."

• Satisfied with the process of agile projects • Dissatisfied with the process of agile projects



Figure 3: Those who are satisfied with the process of their agile projects tend to see a competitive advantage from them (in percent)

1.4 Advantages and opportunities

Expectations for agile methods are quite high overall. First and foremost, respondents expect more efficient projects and faster implementation. Well over 85% see that as "likely" or even "very likely" (see Fig. 4). There is also overwhelming agreement that agile project management increases employee motivation, with 83% agreeing and 29% even strongly agreeing. Most expect the quality of the results to improve as well compared to traditional project management. Views are mixed when it comes to project costs. Most assume that agile projects are more cost-efficient to implement, but not insignificantly, nearly 40% are rather skeptical on this point.

Agile project management as a response to current challenges

The assessment of opportunities by the experts suggests that the use of agile methodologies is the right response to the current challenges in global trade and logistics: That's because they not only allow for faster responses with better results in projects, they also increase satisfaction among the employees.

"How likely is it that these advantages and opportunities can be realized through agile project management?"

More efficiency	24.8		62.4	12.8
Faster implementation	25.6		60.0	14.4
More highly motivated employees	29.3		54.1	16.6
Higher-quality results	24.0		54.9	21.1
Lower project costs in implementation	15.0	45.1		39.9

● Very likely ● Rather likely ● Rather/Very unlikely

Figure 4: Most experts anticipate a broad spectrum of positive effects from agile project management (in percent)

The faster implementation of agile projects is also borne out in practice: Those who frequently use agile methods in projects and thus have first-hand experience with the advantages are particularly certain that they offer a big benefit (see Fig. 5). But even 82% of those who are not planning any agile projects consider it likely that agile projects can be implemented more quickly.

Expectations in planning phase: lower costs

The expectations for lower costs are especially high in the planning phase for the use of agile projects (see Fig. 6), with 79% of this group seeing this as likely. The answers of those who are

already using agile project management indicate different experiences, however. But even here, the majority of those who frequently run agile projects (62%) generally consider a positive effect on costs to be likely, and many (23%) even consider it "very likely." Among those who only rarely use an agile approach, skepticism is higher: Only about half (54%) see a cost-saving potential.

"How likely is it that agile methods will lead to faster implementation of projects?"

● Very likely ● Rather likely ● Rather/Very unlikely

Use frequently	53.8	30.8	15.4
Use rarely	35.7	46.4	17.9
Plan to use	25.0		70.8 4.2
Do not plan to use	12.0	70.0	18.0

Figure 5: Users consider it more likely that agile projects will bring faster implementation (in percent)

"How likely are lower project costs?"

● Very likely ● Rather likely ● Rather/Very unlikely

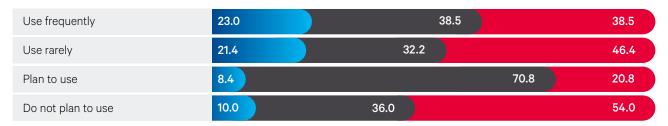


Figure 6: Users consider it more likely that agile project management will bring lower project costs (in percent)

An open question captured additional advantages and opportunities of agile project management in global trade and logistics. The responses can be summarized in the following categories:

Time factor:

Zügig, zeitnah, schnell. Neben der generell schnelleren Umsetzung sehen die Befragten auch als Chance, dass bei einer agilen Vorgehensweise bereits nach kurzer Zeit Ergebnisse und Erfolge vorzuweisen sind.

Flexibility:

Other advantages cited include the ability to respond quickly to changing circumstances and identify problems early on.

Customer orientation:

Closer collaboration with the customer, an open process, and iterative feedback produce results that better align with what customers want.



Resources:

Some respondents feel that costs could be reduced - in general through optimized and flexible use of resources and a shortening of project phases.



Project team members are more closely integrated, given more responsibility, and are more highly motivated. Respondents report that this generates more team spirit and facilitates implementation.

"Hidden challenges and opportunities beyond the pre-conceived scope can be identified and capitalized on."

Respondent

1.5 Disadvantages and risks

When it comes to the subject of project costs, the use of agile methods presents both opportunities and risks. Most experts assume that agile projects can save costs, but at the same time, they feel that an agile approach carries a higher risk of exceeding the defined budget. Somewhat more than half of respondents see at least a basic risk here, though only 7% consider it "very likely" (see Fig. 7). An almost equal number see possible problems in that the heightened need for consultation will cost too much in terms of resources or the project will not be adequately documented.

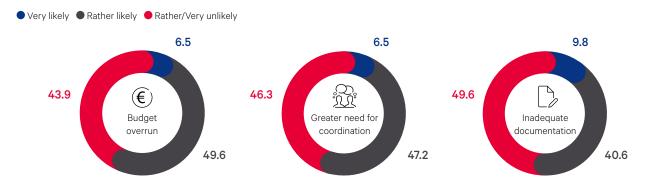
Few concerns when it comes to employee discipline

Nearly one-third fears a lack of discipline due to the degree of freedom that employees are granted. All other consider that

rather unlikely, however. The open responses to this and other questions make it clear that what's most important here is putting together the right team and getting those who are adept in the methodology.

"Bring experts on board and assemble the right people for the team."

Tip from a respondent

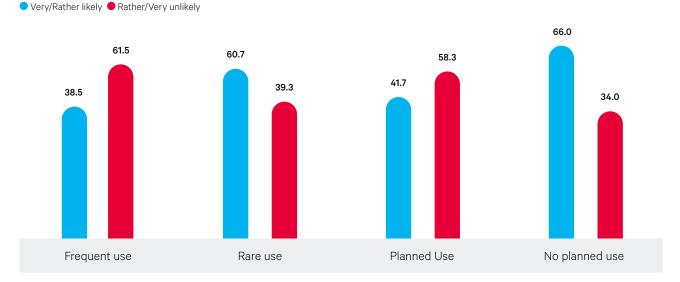


"How likely is it that agile project management yield the following disadvantages and risks?"

Figure 7: Experts disagree on budgetary parameters, the need for coordination and documentation (in percent)

Divided opinions on budget impact

Those who have experience with agile projects seem to have their budgets under control, with 62% of respondents in this group calling it unlikely that the budget would be overrun (see Fig. 8). The less experienced users are more skeptical when it comes to this issue. Those who seldom use agile PM are more likely to see a risk in budget overruns. Those who do not yet have any experience and also are not planning any agile projects are especially skeptical, with two-thirds seeing a certain likelihood of budget overruns.



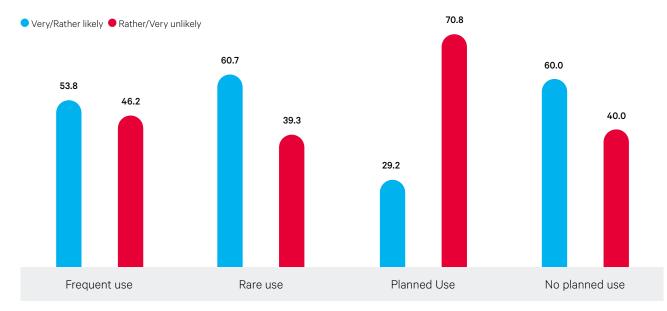
"How likely is a budget overrun?"

Figure 8: Budget overruns are a risk - a view held primarily by those not planning any agile projects (in percent)

Project documentation: optimism in the planning phase

Those who already run agile projects have also often had very different experiences when it comes to documentation (see Fig. 9). While 46% consider it unlikely that agile projects will not be adequately documented, more than half of experienced agility managers see a risk here. The majority of those who rarely run

agile projects and also those who have no experience with them whatsoever regard disadvantages in project documentation as likely. Those planning to start using agile project management, on the other hand, are very optimistic, with nearly 70% anticipating no gaps in the project documentation.



"How likely is inadequate documentation?"

Figure 9: Very optimistic: Those planning to adopt agile project management rarely fear problems with the project documentation (in percent)

"I see the poor quality of results, especially early in the implementation phase, as potentially the main risk."

Tip from a respondent



Process:

Some respondents warn that it's possible to lose sight of the project objectives and for the team to lose its focus. This could be due to a lack of communication, project overreach, or a constant state of adaptation to changing circumstances and requirements.



Team:

The main issue cited here is discipline, but the need for training and uncertainty in the application of new methods are also mentioned. The suitability of the team is a key factor in the success of agile projects.



Respondents also had the opportunity to write in their own

answers about the disadvantages and risks of agile project management in global trade and logistics. The responses can

be summarized in the following categories:

Results:

Do the solutions developed during the project fit into the company's long-term business strategy? Time is wasted and quality suffers if the customer's input comes too slowly, and the shortcomings may start becoming evident at the start of the implementation phase.

2 Use of agile project management

2.1 Traditional or agile?

Under what conditions can agile project management in global trade and logistics capitalize on its strengths? And when is it better to choose traditional methods? All respondents were asked for their opinion on this issue, regardless of whether their companies had any prior experience with agile project management.

Agile management: for projects with many unknowns

Agile methods are especially well suited to projects involving a high degree of unknown tasks, agree more than two-thirds of respondents (see Fig. 10). Agile project management is helpful in such situations because it offers greater flexibility and is more adaptable to unexpected situations. What the responses to this question do not reveal, however, is whether the survey participants believe that, conversely, traditional methods are better suited for managing routine tasks. Supporting this assumption is the fact that when tasks are regular and well understood, a clear set of rules governing responsibilities, processes, and deadlines is often the result of a positive learning curve. If something works well, it generally makes sense to do it the same way next time.

Many experts feel that agile methodologies are also well suited to highly complex, international projects. Nearly half

believe that agile project management is the better choice under these circumstances, while about 28% prefer traditional methods and the rest feel that either approach is equally effective. The responses are nearly the same for both these criteria. It's possible that respondents are thinking primarily of the complexity factor, which also figures prominently in international projects. One source of complexity is the need for communication among various cultures and across various time zones.

Traditional project management favored for deadline-sensitive projects

The jury is out when it comes to long project lead times, with 41% preferring traditional methods here and 37% opting for agile methods. When it comes to deadline-sensitive projects, a plurality of respondents (45%) tend to trust traditional methods, but more than one-fourth (26%) consider either approach acceptable. It seems that many experts associate the adherence to deadlines with clearly defined targets and milestones for monitoring those targets – and these are typical elements of traditional project management.

"Under which circumstances do you feel traditional vs. agile project management is more appropriate?"

Agile is better Both equally appropriate Traditional is better

has a large share of unknown tasks	67.5	19.7 12.8
is highly complex	49.1	22.4 28.5
is very international	48.7	23.1 28.2
has long lead time	36.8	22.2 41.0
is very deadline-sensitive	29.1	25.6 45.3
involves a large number of people	27.4	22.2 50.4

Figure 10: More than two-thirds believe an agile approach is especially well suited to projects with many unknown tasks (in percent)

2.2 Agile projects of respondents

The views of the respondents are based only in part on their own experiences, since only 36% have previously used agile project management in global trade and logistics (see Fig. 11) and only one in ten reports "frequent" use.

Contradiction: many do not plan to use agile project management but believe in its benefits

It's striking that 44% of respondents report no current plans to use agile project management – even though a sizeable majority feels it lends a competitive advantage; associate it with speed, efficiency, quality, and employee motivation; and believe that it will eventually replace traditional methods (see Chapters 1.2 and 1.3). And yet, they do not seize these opportunities. Figure 12 shows why business leaders make this decision.

The primary issue is in fact not a lack of interest or trust in these methodologies but rather a "lack of expertise" (52%). Many also cite the "lack of standards" (28%). A mere one-fifth of respondents feel that agile project management offers no added value over traditional project management, while just 16% indicate that they have "no need" for it. Meanwhile, a large majority sees added value and a need.

Other reasons cited by some respondents: "Decision is made at a higher level," "sticking to old structures," and "it takes longer to change old habits." This means that the main barriers to implementing agile project management are a lack of knowledge and a lack of willingness to make the change.

"Does your company use agile project management in global trade and logistics projects, or do you plan to?"

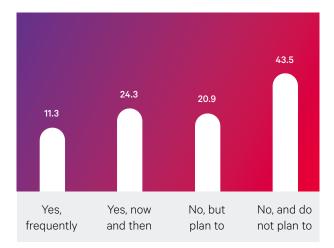


Figure 11: Agile project management (still) plays a minor role in global trade and logistics (in percent)



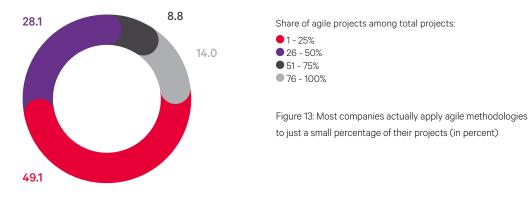
Figure 12: Main reason for not using agile methods: lack of expertise (in percent, multiple responses allowed)

Share of agile projects in global trade and logistics relatively small

Most companies that report using agile methodologies in global trade and logistics actually apply these methods to

fewer than 50% of their projects (see Fig. 13). This share even falls below 25% for nearly half the companies. Only 14% of companies used agile project management in more than three-fourths of their projects in the last two years.

"How high would you estimate the percentage of global trade and logistics projects in the past 24 months in which your company used an agile approach?"



2.3 Who is using agile methodologies?

One finding of the industry comparison is especially noteworthy: Agile project management has not truly arrived in the mechanical engineering sector (see Fig. 14). While 38% of companies in the other industries are already using agile project management and 25% plan to, only about one-fourth of companies in the mechanical engineering sector do so. Most (64%) have not yet shown any interest in a changeover. Presumably, the typically rather protracted projects in this industry do not lend themselves to agile project management (see Chapter 2.1). A comparison of the German-speaking countries with the other, primarily European countries reveals that although Germany, Austria, and Switzerland are already applying agile project management in global trade and logistics more frequently (36% vs. 26%), half the surveyed companies in the German-speaking world are not considering changing their current project management method (see Fig. 15).

Larger enterprises lead the way in agility

The size of the company is one influencing factor (see Fig. 16), with about half of companies with fewer than 2,000 employees currently uninterested in agile PM compared to just 26% of larger enterprises. The percentage of those who use agile PM is also much higher in larger enterprises.

"Does your company use agile project management in global trade and logistics projects, or do you plan to?"



3 Experiences with agile project management

3.1 Drivers

Customer expectations are a major reason for introducing agile approaches, according to more than half of respondents (see Fig. 17). An agile approach makes it possible to respond quickly and flexibly to customer requirements and develop specific and personalized objectives or project requirements as the project unfolds.

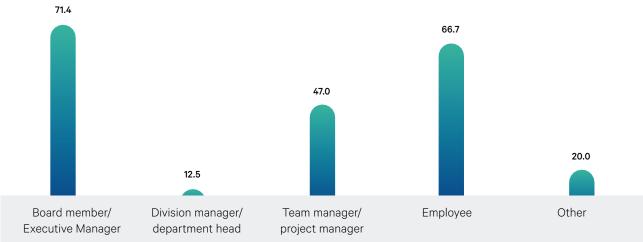
Agile project management often driven from top down In many instances (45%), the introduction of agile project management is driven directly by management. This makes sense, as this kind of change must be supported by the company leadership. Agile methods involve reassigning responsibility and at least partially suspending typical hierarchies. When the company management believes it will gain a competitive advantage, is open to innovation, and is willing to review its hierarchies, change can come from the top down. The surveyed managers largely see themselves as drivers of agile projects (71%), and a relatively large share of employees (67%) agree that management leads the way here. The upper and middle levels of management see a top-down initiative in much smaller numbers, however (see Fig. 18).

Surprisingly, the IT department is cited by only one-third of respondents (32%) as the driver of agile project management, even though the methodology has its origins in information technology.

"Who drives agile pro-	Customer with their expectations	52.3
ject management in	Executive management	44.6
your company?"	Departments	36.9
	IT department	32.3
	Project management office	26.2
	Nobody	7.7
	Other	3.1

Figure 17: Customer expectations are the number-one driver of agility (in percent, multiple responses allowed)

"Does management drive agility in your company"



Agreement based on position of respondent

Figure 18: Company managers largely see themselves as drivers of agility (in percent)

3.2 Quality assurance

How can quality be assured in agile projects? Respondents report employee training and the introduction of agile standards as the primary factors here (see Fig. 19). But even though these responses are the most commonly cited, more than half the companies using or planning to use agile methodologies do not conduct any special training in the methodology or apply any standards.

Expertise and standards seem to generally be weak points in agile project management in global trade and logistics, as they are not yet widely established as quality standards among (future) users of agile methods, and their absence is also cited as the major obstacle among non-users.

One-fifth ignores quality assurance entirely

When it comes to assuring the quality of agile projects, 28% of companies enlist the support of outside consultants, while 17% rely on mentoring. External project managers play only a minor role in quality assurance. One-fifth of respondents concede that they do not use any quality assurance measures in agile projects. Under "other," respondents cite various elements: documentation, supervisory groups, a high level of coordination within the project, centralized contact persons for technical issues, approval processes prior to go-live, and the hiring of new employees.

"What quality assurance	Training of employees	47.7
measures does your company apply to agile	Introduction of agile standards	41.5
project management in	External consultants	27.7
global trade and logistics?"	None	20.0
	Introduction of mentoring	16.9
	External project managers	12.3
	Other	9.2

Figure 19: Training and agile standards are most commonly employed quality assurance measures (in percent, multiple responses allowed)

Employee training and mentoring improve process

Everyone who had the support of mentoring during agile projects is generally happy with how the project proceeded (see Fig. 20) compared to only 74% of those who did not have mentoring. Employee training is another important factor of successful projects: 93% of those who had it are happy with the process compared to only 63% of those without. Doing something seems important in any case, because only 58% of those who report doing "nothing" for quality assurance in agile projects are satisfied with the process.

Employee training is also a key determinant of satisfaction with the results of agile projects, leading to almost complete satisfaction (97%) compared to a still impressive satisfaction rate of 78% among those who did not train employees (see Fig. 21). Interestingly, the involvement of external project managers often has a negative effect on the success of the project, since only 63% of this group is satisfied with the results compared to 92% of those who did not use external project managers.



Satisfaction with process of agile projects

Figure 20: When mentoring is used for quality assurance, the process of agile projects is satisfactory (in percent)



Satisfaction with results of agile projects

Figure 21: Those who use external project managers are less often satisfied with the results (in percent)

3.3 Practices

When survey participants are asked which agile practices are actually used in global trade and logistics, the self-organized team is named most frequently (see Fig. 22). More than half of respondents (57%) report managing agile projects this way. Other important practices include task boards and planning/ review meetings. Strikingly, more than one-third also use daily standup meetings. What this suggests is that visualization and coordination in the team are the main priority. About 30% report taking an iterative approach to agile projects. The other practices offered as choices garnered far fewer responses. Under "other," respondents mentioned regular meetings, vision-oriented epics, and user story management.

	Self-organized team	56.5
"Which of the following practices do you use	Task board	41.9
for agile project management in global	Planning/review meetings	40.3
trade and logistics?"	Daily standup meetings	37.1
	Iterative approach	30.7
	Backlog	17.7
	Personas/user stories	12.9
	None of the above/no others	8.1
	Retrospectives	6.6
	Burn down chart	4.8
	Kudo cards	3.2
	Other (specify)	4.8

Figure 22: More than half of companies using agile methods rely on self-organizing project teams (in percent, multiple responses allowed)

3.4 Satisfaction

The experiences of respondents make a clear case for an agile approach in global trade and logistics. Some 80% of those surveyed are satisfied with the process of their agile

projects (see Fig. 23). The results of the projects were even more positive, with some 88% expressing satisfaction here and a full one-fifth even "very satisfied."



"How satisfied are you overall with the agile global trade and logistics projects in your company?"

Figure 23: Satisfaction with agile projects is the norm (in percent)

The greater the share of agile projects, the greater the satisfaction

Those who use agile methods for at least half of their projects are generally satisfied with the results of their agile projects (see Fig. 24). Those who use agile methods for more than 75% of their projects are even "very satisfied." At first glance, the clear recommendation would seem to be to use agile project management and gather experience, since experience seems to lead to projects that run better and yield better results. It remains to be verified, however, whether the agile experts are active in special project circumstances in which agile methods can unlock their full potential.

Satisfaction with results of agile projects

Very satisfied
Mostly satisfied
Dissatisfied
by share of agile projects

76 - 100%	75.0			25.0
51 - 75%	33.3			66.7
26 - 50%	13.3		80.0	6.7
1 - 25%	11.5	73.1		15.4

Figure 24: Agile experts are more satisfied with the results of their agile projects (in percent)

3.5 Success factors and tips

The most important thing in agile projects is not which specific tools or methodologies you use, it's about a fresh mindset. Nearly three-fourths of respondents see corporate culture as a critical success factor (see Fig. 25), and this viewpoint is most pronounced among employees under 50 (see Fig. 26).

A sizeable majority (61%) emphasized the importance of having the support of supervisors and company management, and more than half (57%) also cited discipline on the project

team as a key success factor. Methodologies and the definition of standards are named by fewer respondents. Bottom line: The company needs to be ready for agile project management. An agile approach requires the right attitude and a new mindset that must be embraced from the CEO down to each member of the project team. That's why training should take these issues into account and not simply teach methodologies.



Figure 25: Corporate culture is the most important success factor in agile projects (in percent, multiple responses allowed) ³

Corporate culture is one of three key success factors for agile projects

by age of respondent

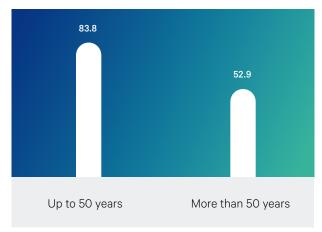


Figure 26: Younger employees in particular consider corporate culture an important success factor (in percent)

³ In this question, respondents were asked to choose the three most important success factors from a predefined list. The diagram shows the number of times each factor was selected.

Four tips from respondents for successful agile project management

In an open question, respondents were asked for their tips for successful agile project management in global trade and logistics. The answers generally relate to the following five categories:



Acceptance:

"Broad-based understanding and support within the company and among decision-makers and stakeholders."

"Ensure the necessary understanding and acceptance of your project team's approach in other parts of the company."

"Stakeholders need to be engaged regularly to ensure alignment of business and organizational strategy."

"Decision-makers need to be ready for 'surprises,' keep an open mind, and be flexible to cope with changes and uncertainties."



Resources: "Specify and set aside resources and tools beforehand."

"... free up the necessary internal resources."

"Experiment, apply the tools"

"Make sure you have the right resources available"



Empowerment

"Bring experts on board and assemble the right people for the team."

"Send all the managers to training so that they understand what it's all about. Otherwise, this kind of thing won't even get off the ground."

"Educate all the participants early on about what agile means, especially the work that will be involved."



Approach

"Good coaching, and adapt the methodology pragmatically on the project team."

"Set standards and develop a shared understanding of agile project management."

"Don't mix traditional PM and agile PM in hybrid models."

"All elements of PM must be agile (budget, project accounting, etc.)."

"Clearly developed vision and collaborative model."

"Self-discipline is the absolute top priority for each and every individual, followed by the project leader, who needs to have the necessary trust."

"Do not rigidly focus on one overarching project objective. Instead, break down the ultimate goal into several interim goals with distinct timelines, the results of which then feed into the achievement of the ultimate goal."

"The most important things is to find out what the customer really needs."



Encouragement: "Just start."

"Get started and gather experience."

"Test it and you'll see ..."

"Try it out and get experience."

Participants in the study

A total of 155 experts from the fields of logistics (39%), global trade (35%), and IT (13%) took part in the study (see Fig. 27). The questionnaire was available in both German and English, with about one-fifth opting for the English version. One in ten respondents is a member of the executive management or board (see Fig. 28), though most occupy middle management

positions. About 30% of the respondents are team or project leaders, and another 25% head a unit or department. The average age of respondents is relatively high at 46.6 years. The youngest is 27, the oldest 70. Only 28% of respondents are 40 or younger (see Fig. 29). Most participants are men, but the proportion of women was above one-fifth at 23%.

Field	Logistics	39.4
	Global trade	35.4
	IT	13.1
	None of the above	12.1

Figure 27: Respondents work primarily in global trade and logistics (in percent)

Position in the company	Board/executive management	11.1
	Division manager/department head	25.3
	Team manager/project manager	30.3
	Employee/head of unit	22.2
	Other ⁵	11.1

Abb. 28: The majority of respondents occupy middle management positions (in percent) ⁵

⁴ Other fields cited under "other": purchasing/import, customs, finance/accounting, sales/administration, management, supply chain, management consulting, marketing, OHSE, commercial management, export compliance.

⁵ Positions cited under "other": shipping manager, purchasing, head of customs, sales/case manager, customs specialist, customs director, project/process manager, compliance, export controls, transport manager, logistics manager. Respondents did not assign these job descriptions to a specific position or management level.

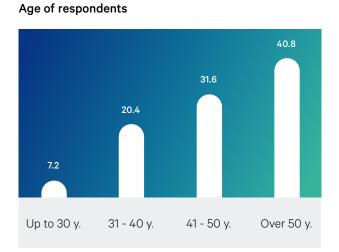
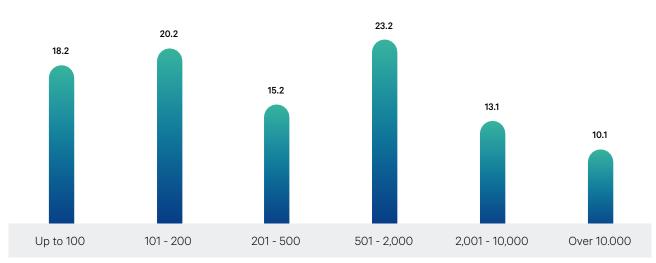


Figure 29: High average age of respondents: 46.6 years (in percent)

The study encompassed a broad professional spectrum, including businesses of various sizes, in various industries, and based in various European countries. Small and mediumsized businesses are most prominently represented: A little more than half of the companies have fewer than 500 employees (see Fig. 30), and nearly a quarter (23%) have over 2,000.

The mechanical engineering sector is most strongly represented at 31% (see Fig. 31), followed by transport/ logistics/services at 20% and chemical/pharmaceutical at 12%. A solid majority of companies are based in Germany (60%) or at least in the German-speaking world that includes Austria (6%) and Switzerland (15%). (See Fig. 32.) After that, the most respondents are from the Netherlands, UK, Sweden, and "other" (Ireland, Italy, Spain, Singapore, Asia, worldwide).



Number of employees

Figure 30: Small and medium-sized businesses well represented (in percent)

Industries	Mechanical engineering	31.3
	Transport/logistics/services	20.3
	Chemical/pharmaceutical	12.1
	Aerospace/defense	9.1
	IT/measurement and control technology	6.1
	Commercial	6.1
	Food/beverage	6.1
	Other	9.0

Figure 31: Broad spectrum of industries represented among respondents (in percent)

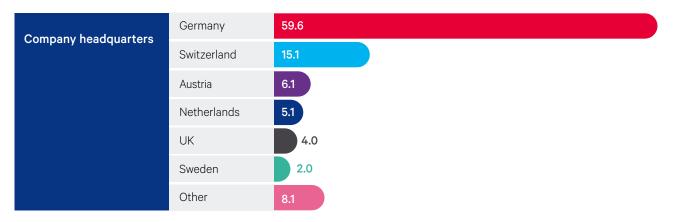


Figure 32: Respondents based primarily in Germany, Austria, and Switzerland (in percent)

About this document



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