

Integrated Supply Chain Management – Business Benefits through Collaborative Logistics

Excerpt of results of survey conducted for 2009 PPI Transport Symposium
(Liverpool, Oct. 6th – Oct. 9th, 2009)

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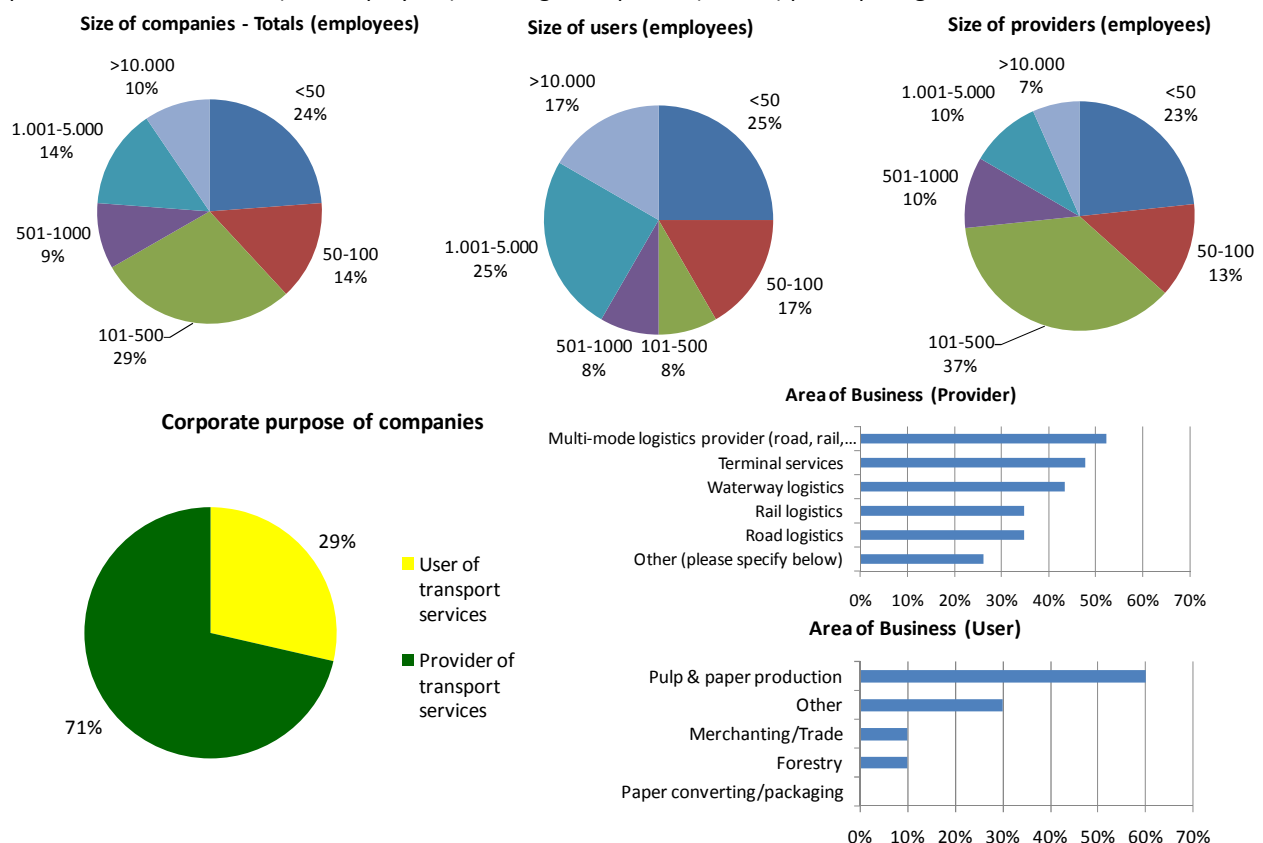
As part of the PPI Transport Symposium held in Liverpool October 6th-9th, a survey was conducted among the participants, the results reflect their self-perception. The participants were categorized into two groups: On the one side users of transportation and logistics services such as pulp and paper producing companies, merchants, traders and forestry companies and on the other side providers of logistics services such as multi-mode logistics companies (road, rail, shipping), and terminal and warehouse operators. Each group was asked different but comparable questions reflecting their respective position in the value chain. These questions focus on collaboration, Supply Chain Management, and the exploitation of efficiency drivers in logistics.

The interpretation of results provides insight with regards to the perceived efficiency obtained from collaboration – differing between users and providers of logistics services:

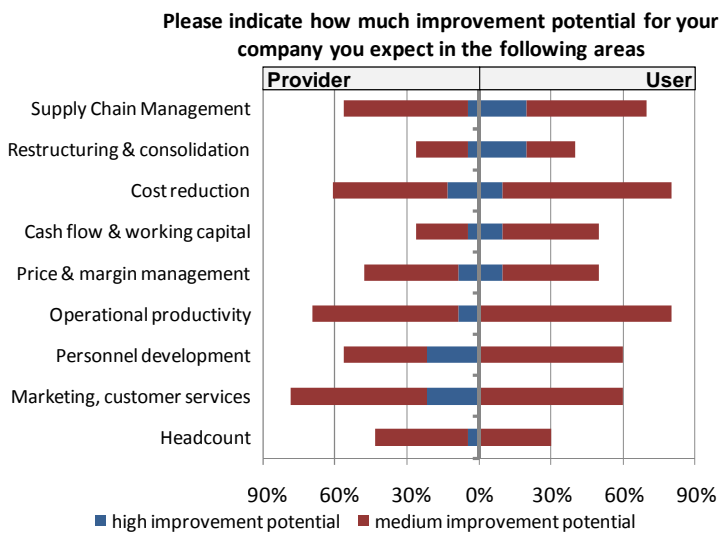
- The majority of participants state to be collaborative but reach different levels of perceived efficiency/benefits in their collaboration
- Successful collaboration requires similar basic targets, but users indicated that they primarily focus on improving cost, while the majority of providers focus on improving service – this indicates a distinct mismatch
- Participants with low collaboration levels also scored low in the level of efficiency
- At the same degree of collaboration within the Collaboration-Efficiency-Matrix, transport providers score higher in logistics efficiency than users do
- Participants focus on efficiency and increased collaboration, but the majority of participants are not ready to share planning information
- The survey shows that potentials of win-win-situations through cooperation are not utilized to full extent.

Demographics

The largest share of providers participating is working for companies with 101 and 500 employees. In total, there is an equal distribution of small (<50 employees) and large companies (>1.000) participating.

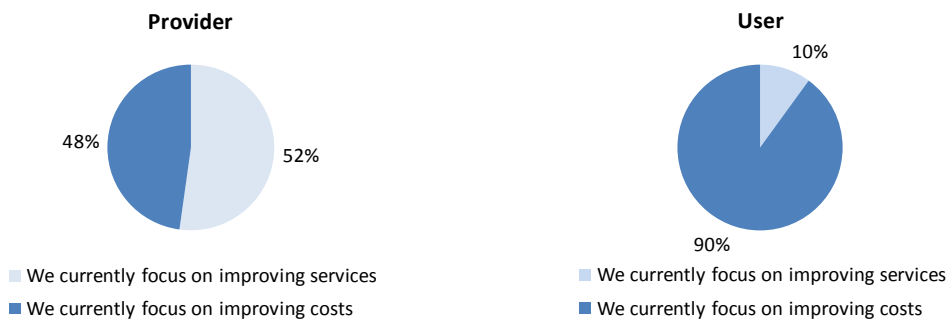


Excerpt of Survey Results



Users and providers expect similar potentials in “Supply Chain Management”. 80% of users see high & medium improvement potentials in “cost reduction”, compared to 60% of providers. 80% of providers see high & medium potentials in “marketing and customer service”, while 60% of users see high & medium potential in this area. The results shows that some areas where customers see high improvement potentials do not match with those improvement area providers see. Especially the topics “restructuring & consolidation” and “cashflow & working capital” point to a diverging view on improvement potentials.

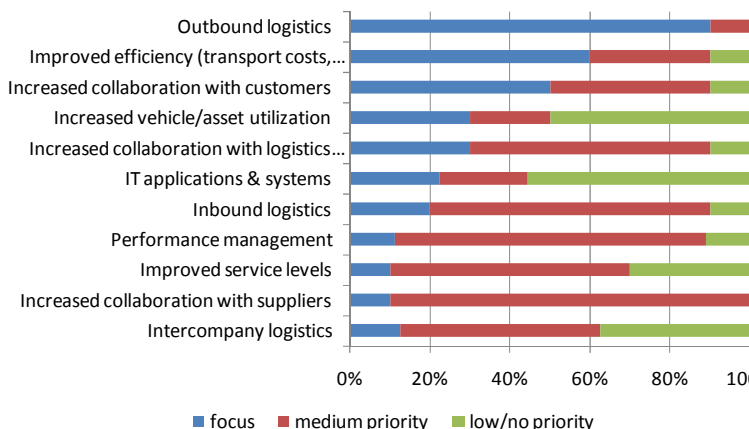
Current Supply Chain Focus: Users and providers of logistics services have significantly differing priorities. While 90% of the users who participated in the survey focus on improving cost, only 48% of the providers focus on improving cost – they rather focus on improving service.



Exploiting drivers of transport and logistical efficiency: More than 60% of *users* state to improve “truck utilization” extensively, the other 40% exploit this area to a medium extent. 50% of *users* exploit “demand forecasting with customers” extensively, 38% of users to a medium extent. 86% of the *users* state to exploit “demand forecasting for suppliers” to a medium extent, but no respondent indicates extensive usage of this area.

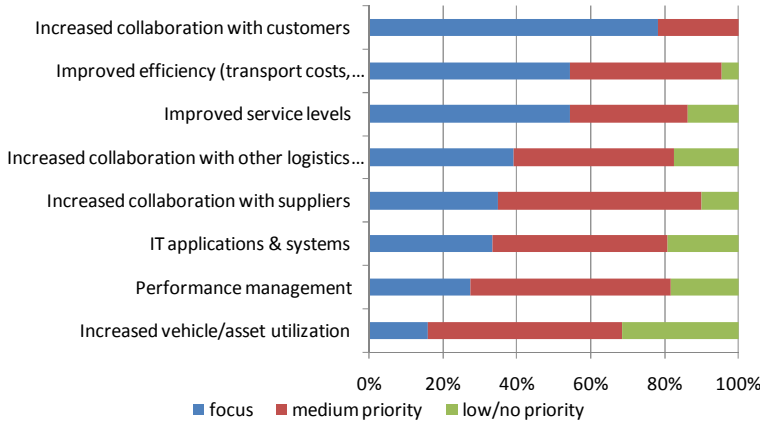
“Backhauling” is the area exploited most extensively (44%) by *providers*, 38% indicate medium usage of this topic. Only 40% of *providers* of logistics services state that they exploit “truck utilization optimization” extensively, 20% indicate low or no usage of this area. 30% of the respondents state extensive usage of “IT integration with Supply Chain partners”. “Shift of transport mode” is the area with the highest accumulated amount of extensive (27%) and medium (60%) usage, only 13% indicate that they use this efficiency driver to low or no extent.

User: What is your current focus in Supply Chain Management?



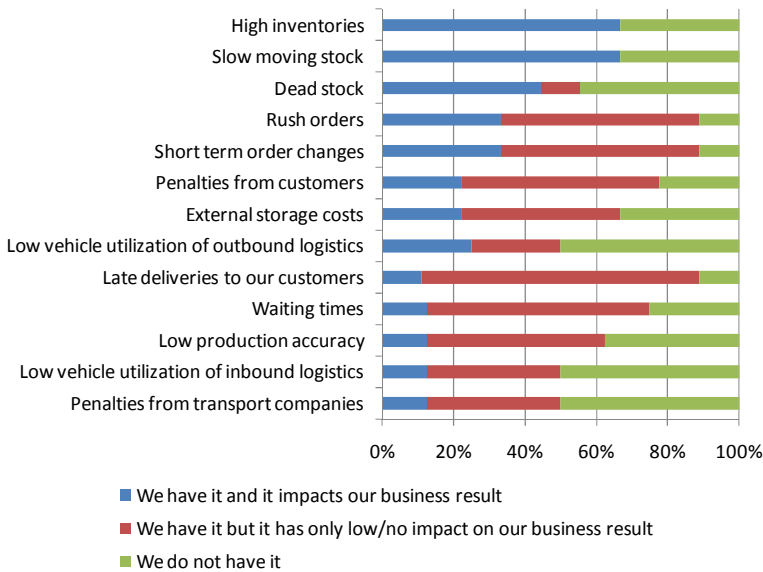
Focus in Supply Chain Management: The main focus for *users* is “outbound logistics” (90%), followed by “improved efficiency” (60%) and “increased collaboration with customers”. Furthermore, 50% of users say that “vehicle/asset utilization” has low or no priority to them. “Increased collaboration” is of high priority, but “focus on IT applications” is relatively low. “Inbound logistics” has only medium priority for 70% of the users who participated.

Provider: What is your current focus in Supply Chain Management?



The majority (80%) of *logistics providers* say that they focus on “increased collaboration with customers”. Over 50% of responding providers focus on “improved service levels”. Only 13% focus on “increased vehicle or asset utilization” and 32% state that this topic has low or no priority. Roughly 50% of providers said they focus on improving efficiency – compared to 60% of providers.

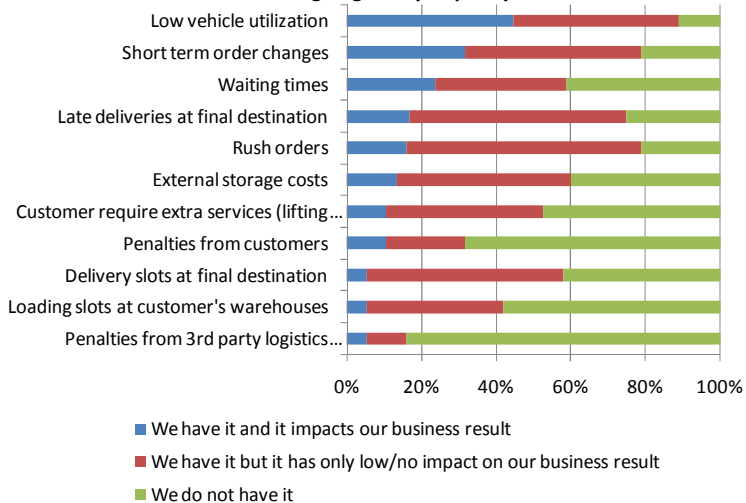
User: Do the following negatively impact your business results?



Factors that negatively impact business results:

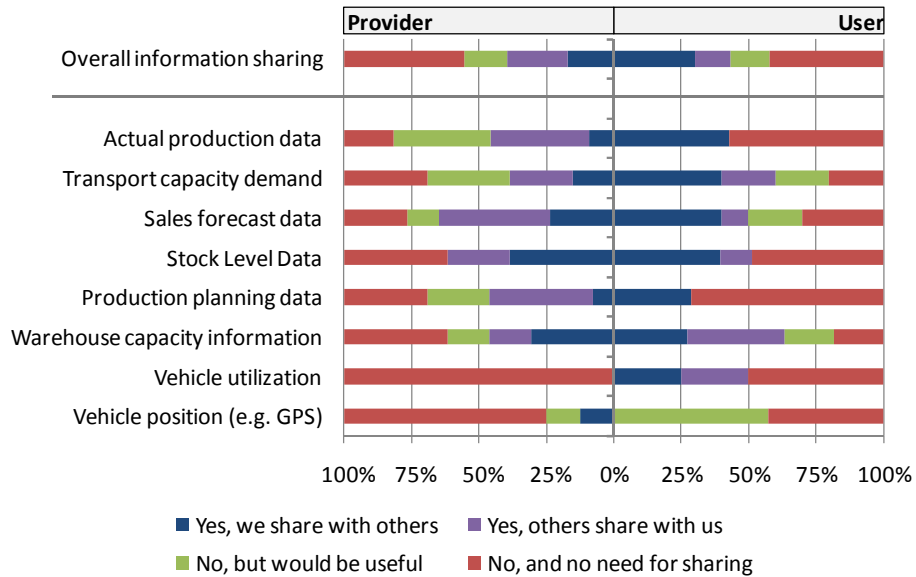
From a supply chain view “high inventories”, “slow moving stock” (about 65% each) and “dead stock” (about 45%) are perceived to have the most negative impact on business results of *users*. “Outbound vehicle utilization” is perceived to have little impact on the business results of the responding users (about 10% indicated an impact, about 35% indicated the existence of this driver but no impact, and 55% indicated the inexistence of this driver). The categories mentioned most often but with low business impact were “rush orders”, “short term order changes”, “penalties from customers”, “late deliveries”, “delivery slots at customers” and “stock outs”. “Delivery slots at customers”, “stock-outs” and “late pick-ups from warehouses” are not mentioned to have an impact on user’s business results.

Provider: Do the following negatively impact your business results?

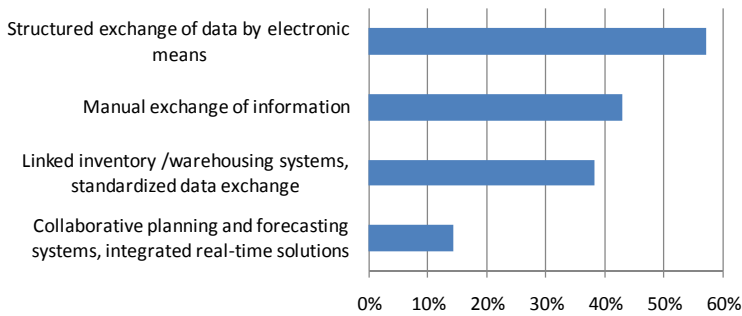


“Low vehicle utilization” is perceived to have the highest impact on business results (44%) of *providers*, followed by “short term order changes” (32%). “Penalties from customers” appear to have very little impact (11%) on a logistics providers business and, additionally, 68% of the respondents state that they do not even have penalties from customers. Comparing answers of providers and answers of users, answers of providers are distributed more evenly. Providers of logistics services state to be impacted not as much as customers are (“impacted”: 17% of all provider’s responses, 29% of all customer’s responses).

Information sharing between Supply Chain partners: On average, 45% users and providers share information to a similar extent with an additional 10% who indicated that it would be useful to share. 45% of respondents indicated that there is no need to share information. Analyzing which information is shared in specific areas shows, that there are different viewpoints regarding potential benefits. With respect to “production data” and “production planning data” more than 50% of users do not see a benefit in sharing whereas providers state to a large degree that this information would be useful. “Sales forecast data” and “stock level data” is already stated to be shared by approximately 50 % of both users and providers. With respect to “vehicle utilization” information providers do not see a benefit in sharing this information and users either stated that this information is already being shared (50%) or there is no benefit in sharing.

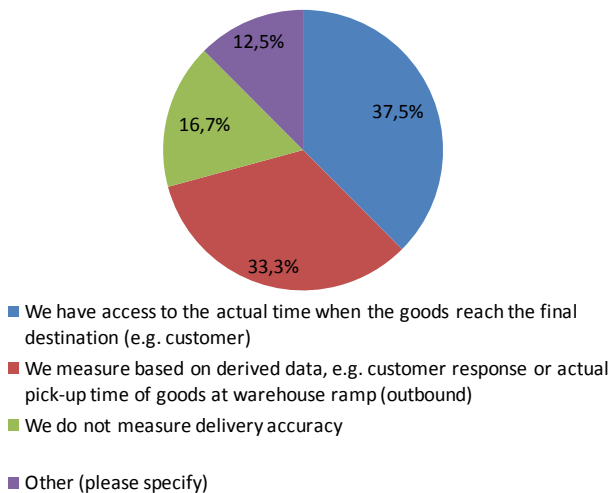


How do you technically exchange Supply Chain data?



Exchange of Supply Chain data: The majority (57%) of respondents state to use structured exchange of data by electronic means, and 38% have linked warehousing systems. More than 40% exchange information manually. 14% state to have collaborative planning and forecasting systems, integrated real-time solutions in place.

How do you measure delivery accuracy?



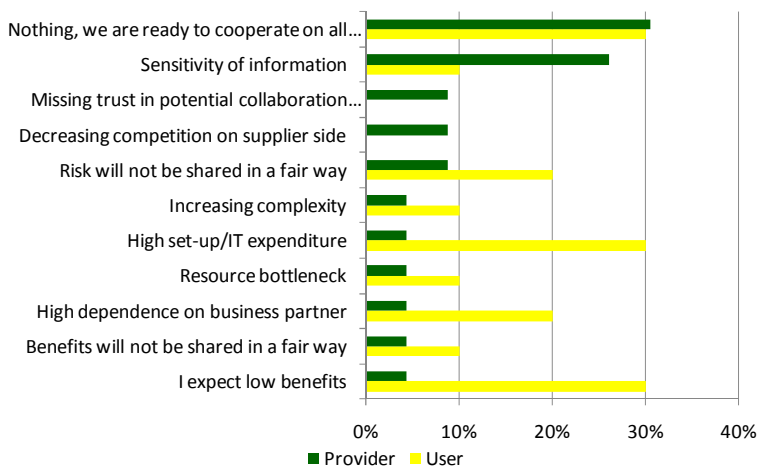
Delivery accuracy: 37% of the respondents indicate that they have access to real time data to measure delivery accuracy. However, 33% claim to measure delivery accuracy from derived data and 17% say the delivery accuracy is not measured. The 13% of “other” measurements mentioned are tracking every truck gate-to-gate or measurement based on data provided by supplier.

Do you agree to the following statements about Supply Chain & logistics performance measurement in your company?



More than 90% of the participants measure their own logistics performance and about 40% measure the performance of their Supply Chain partners. The same number of respondents (37%) measure the performance of their logistics providers and the logistics performance of their providers. Only 4,2% of the respondents indicate that they do not measure logistics performance. Only 5% stated to measure performance across the entire supply chain. Inbound supply chain performance management is only measured to a low degree.

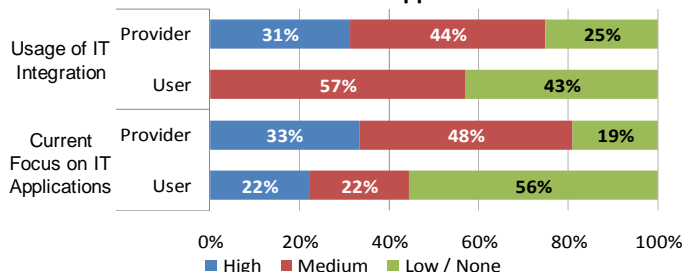
What keeps you from increasing collaboration with your Supply Chain partners? (multiple answers allowed)



30% of respondents, both providers of logistics services and users, state that there are no obstacles to collaborate on all levels of the Supply Chain. "Sensitivity of information" is the most important obstacle to collaboration for providers (26%). Low benefit expectations (30%), high set-up-expenditures (30%), uneven risk sharing (20%) and high dependence (20%) are obstacles for users.

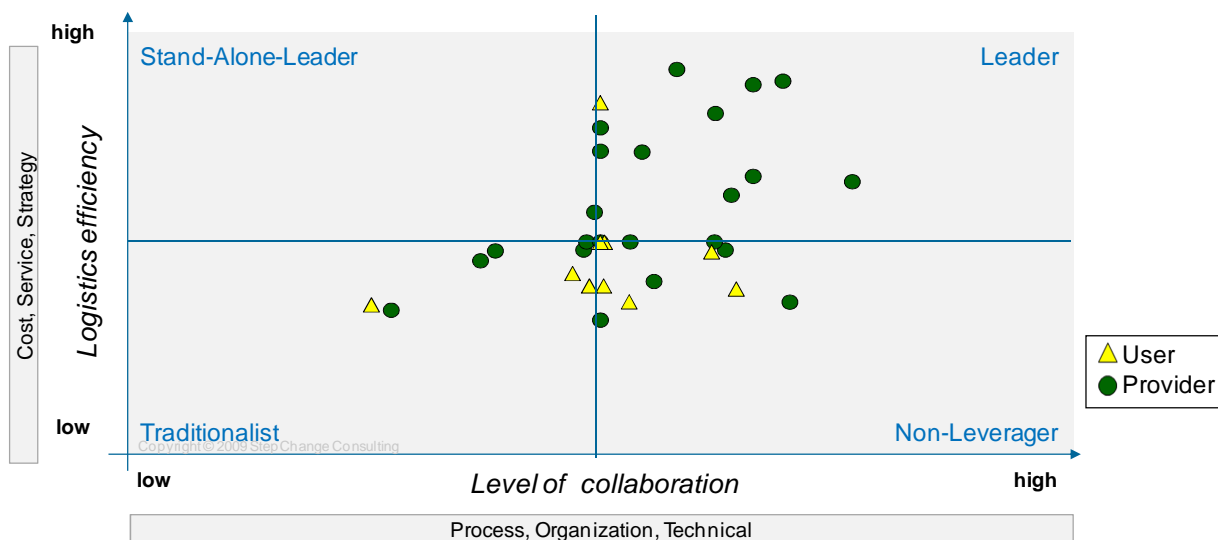
Logistics providers indicate to use IT integration more intensely than users, 31% of providers indicate a high usage of IT integration, compared to 0% of the users. Overall 75% of providers have high or medium usage of IT integration and 81% of providers focus on IT integration to a high or medium level. However the majority of users do not focus on IT applications at the moment, 56% of the responding users indicate a low or no focus. Expected setup time & IT expenditures represent an obstacle to Supply Chain integration for one third of the users. Only 4% of providers see IT as an obstacle to integration.

Current Focus on IT Applications



Survey Result –Collaboration Matrix*: Each answer provided was translated into a numerical value for either collaboration or efficiency criteria thus enabling the mapping on a matrix with four quadrants. Yellow triangles represent users, green dots providers of logistics services. The horizontal x-axis shows the level of collaboration of the respondents, the vertical y-axis shows how effective a respondent is in terms of logistics efficiency.

Not one respondent was mapped into the “Stand-Alone-Leader” quadrant on the upper left side meaning that there is a perceived high level of efficiency achieved without collaboration. Many respondents are mapped into the lower right quadrant – the “Non-Leverager”-quadrant. This means that although efforts are put into collaboration, it does not seem to pay off in terms of higher efficiency. Also interesting to note is that in the “leader” quadrant only providers of logistics services can be found – the quadrant where high level of collaboration also leads to a perceived high level of efficiency. It has to be emphasized, that these results only reflect the self-perception of the participating companies.



* Based on score model

„Collaboration is an agreement between partners to share and exchanging information to achieve a win-win situation”

- The survey result reflects the self-perception of the participants and is not based upon an impartial assessment.
- Many respondents are on a high level of collaboration, but cannot leverage this position to increase logistics efficiency.
- Users indicate to focus on cost while providers focus on service
- Providers seem to be more efficient than users at the same level of collaboration.
- Collaboration can unveil potentials for efficiency increase but does not increase efficiency automatically.
- A low level of collaboration seems to correspond with a low level of efficiency.
- The tradeoff between increased efficiency and a possible loss of flexibility has to be assessed carefully on an individual basis.
- Logistics providers seem to exploit efficiency potentials better than users do.
- Successful collaboration requires partners with efficient internal processes and clearly defined interfaces (“Do your homework first”).
- Sustainable collaboration is based on mutual benefits for both parties and requires open exchange of information.
- Increasing the level of efficiency and collaboration requires the willingness to share information
- Entering into collaboration from a position of strength reduces the risk of being squeezed by collaboration partners.