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D 6.23 Report on Retail Survey Results

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PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Report on Retail Survey Results

Summary

One subproject in the Sustain Pack project is to develop communicative packaging. This is a very critical area, wherefore it is important to investigate the positions and requirements of the end user (actors in the supply chain and consumer) before the decisions and developments of the communicative packaging technologies are taken.

In the light of this, a Retail Survey focusing on pro-active and passive communicative technologies was carried out in the autumn of 2004. The Retail Survey was based on a questionnaire, which was sent to key retailers in Europe. The feedback gave some clear answers, but there were also several contradictions and paradoxes in the answers.

Because of the importance of understanding the retailers' attitude, it was decided to look deeper into the questions, to which there were some discrepancies. This present reports objective is therefore to go in-depth with those issues, which were not clear in the survey. The in-depth interviews are conducted by phone.

The difference between the two surveys is small. It is still the most "common known" technologies, which are rated the highest. Even though the technologies were explained more in details during the in-depth interviews, the over all rating did not change considerably. This can of course be due to the fact that it is difficult to see the possibilities from an explanation or that the knowledge still is too little to change the perception. RFID is the highest rated in both surveys. In the in-depth interviews, the RFID technology is followed by TTIs and RFID extended. RFID can be used on all products, whereas TTIs and RFID extended will primarily be limited to the cooling chain.

The maturity sensor has climbed up, which might be due to the fact that the sensor can be used in a positive way, that is not telling something is wrong, but indicating a maturity level.

Leak is rated less important in the interviews than in the retail survey. The reason for that could be that the problem is not yet realized in the supply chain.

Light and RH are lowest rated in both surveys.

In the retail survey, the retailers suggest that the technology should be used mainly within the logistics area on cases and pallets. There is nothing in this survey that contradicts those statements. However, some retailers are open to use for instance maturity sensors or other technologies, which somehow (only) can be used in a positive way. That is, not telling that something is wrong, but more being an added value to the consumer.

In the survey there was a contradiction between the fact that retailers do not want consumers to read the indicators, but still wanted their "consumer acceptance".

Report on Retail Survey Results

If the consumers should be allowed to access the technologies at all, it is important that the consumers understand the functions of the indicators and sensors and it is of highest importance that the technologies can be trusted. Otherwise it will only be a confusing element, which might give some bad will to brand and retailer.

The consumer has to be educated to understand the functions of the specific indicator or sensor. The fact that different information can occur on the packaging at the same time (with can result in confusion) is a main issue that has to be taken care of, if a technology shall be implemented. The issue that an indicator can change colour after having left the store, is also a major topic. The retailers want to avoid disputes with claims, because an indicator changes signal after having left the store.

Even though the following in-depth interviews were conducted in a relatively small number, the results do not differ considerably from the Retail Survey and the results can therefore be considered representative to retailers' attitude towards the questioned issues.

Report on Retail Survey Results

Content

Summary

1. Background for the report	5
2. Introduction to the issue	6
3. Methods	7
4. Preparing the in-depth interviews	8
4.1 Questions/issues to be part of the structure frame	8
4.1.1 General assessment of the different technologies	8
4.1.2 Consumer acceptance contra inaccessibility of the indicator or sensor to the consumers	10
4.1.3 Expiry date (fixed) contra information from the indicator or sensor	11
4.2 Structure frame for the interviews	11
4.3 Selection of the retailers to do the interview	11
5. In-depth interviews	12
5.1 Results	12
5.1.1 Results on general assessment of the different technologies	13
5.1.2 Results on consumer acceptance contra inaccessibility of the indicator or sensor to the consumers	17
5.1.3 Results on expiry date (fixed) contra information from the indicator or sensor	19
5.1.4 General statements on indicators and sensors	19
5.2 Situation overview	21
6. Answers compared to the Retail Survey	23
7. Conclusion	25

Report on Retail Survey Results

1. Background for the report

One subproject in the Sustain Pack project is to develop communicative packaging. This is a very critical area, wherefore it is important to investigate the positions and requirements of the end user (actors in the supply chain and consumer) before the decisions and developments of the communicative packaging technologies are taken.

In the light of this, a Retail Survey focusing on pro-active and passive communicative technologies was carried out in the autumn of 2004. The pro-active technologies were wireless communication and information technologies valid in the entire supply chain and aims at two way communication. As examples can be mentioned different chemicals or electric indicators and sensors build into the packaging. The passive technologies aim at one way and give just information or “appeal” to the consumer. Here, focus was on electronic and optical functionalities.

The Retail Survey was based on a questionnaire, which was sent to key retailers in Europe. The feed-back gave some clear answers, but there were also several contradictions and paradoxes in the answers.

Because of the importance of understanding the retailers’ attitude, it is decided to look deeper into the questions, to which there were some discrepancies. This present reports objective is therefore to go in-depth with those issues, which haven’t been clear in the survey.

Report on Retail Survey Results

2. Introduction to the issue

Some of the results from the Retail Survey of 2004 were very clear. However, there were also several contradictions and paradoxes in the answers.

Because of the importance of understanding the retailers' attitude, it is decided to look deeper into the questions, to which there were some discrepancies. This present reports objective is therefore to go in-depth with those issues, which haven't been clear in the survey.

To clarify those answers, it has been chosen to conduct in-depth interviews with 4-5 of the retailers, who already attended the Retail Survey in 2004.

Report on Retail Survey Results

3. Methods

The results and the conclusions of the Retail Survey will be studied thoroughly and a structure frame for an interview will be drawn up, with focus on the answers, which were contradicting each other. There will also be focus on questions, which were inadequate answered in the survey. Having seen the results of the Retail Survey, some questions, which were not in the survey, seem to be urgent and will also be a part of the frame.

The questionnaires, which were filled in by the retailers will also be studied and 4-5 of them will be selected to an interview.

Report on Retail Survey Results

4. Preparing the in-depth interviews

In order to create a structure frame for the interviews, focus has been given on the answers from the Retail Survey, which were:

- contradicting each other
- showing need for additional investigation
- not directly in the survey, but seem to be urgent

4.1 Questions/issues to be part of the structure frame

The different questions and issues that should be part of the structure frame are examined in the following sub chapters. The questions will provide opportunities for discussing the issues more closely than a questionnaire survey. The answers will therefore also be difficult to categorise in a matrix, but will take form of statements.

4.1.1 General assessment of the different technologies

In the Retail Survey, the retailers were asked to rank the different technologies according to importance. According to importance the retailers ranked the technologies as follows:

1. Logistics (RFID)
2. Leak Indicators
3. Freshness Indicators
4. Bio Sensors
5. Time Temperature Indicators (TTI)
6. RFID - extended use
7. Maturity Sensors
8. Light Indicators
9. Relative Humidity Sensors (RH)

Report on Retail Survey Results

To find out if there is a correlation between how the technologies are rated and the retailers' knowledge and use/test of these, following table is made.

Technology	Knowledge of the technology (%)	No knowledge of technology (%)	Have worked or tested the technology (%)	Have not worked or tested the technology (%)
Logistics (RFID)	100	0	50	50
Leak Indicators	100	0	50	50
Freshness Indicators	50	50	35	65
Bio Sensors	60	40	0	100
Time Temperature Indicators (TTI)	100	0	50	50
RFID - extended use	80	20	0	100
Maturity Sensors	50	50	0	100
Light Indicators	20	80	0	100
Relative Humidity Sensors (RH)	40	60	0	100

Table 1

The table shows that there is a connexion between the ranked position and the knowledge and especially the work/test of the technology.

In the survey, each technology was very briefly explained. Table 1 shows that a more specific explanation of the technologies and their use could give some more thoroughly answers.

Concerning the technology, which already has been worked with or tested by the retailer, it would be relevant to know if they have just tested it or if it is actually used. It would also be interesting to know if the technology was implemented or disregarded subsequently. And at the same time the raking of the importance of the technology.

Questions/subject, which should be part of the in-depth interview

A more specific explanation of the different technologies.

Report on Retail Survey Results

Present level in company in relation to each technology

No knowledge of the technology

Know the technology

Have tested it.

(0) No

(1) in test right now,

(2) test + implementing

(3) test + disregarding.

Ad. 0 Any plans?

Ad. 2 Specific uses?

Ad. 3 Why?

Raking of importance now and in the future for each technology.

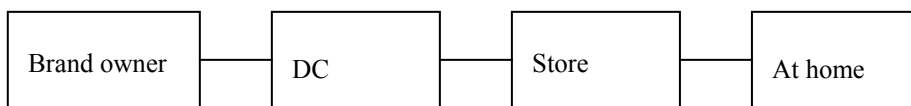
4.1.2 Consumer acceptance contra inaccessibility of the indicator or sensor to the consumers

Some of the results suggested that consumer acceptance was important to the retailers. At the same time, the survey clearly showed that the retailers do not want consumers to be able to read the indicators/sensors.

It is important to find out, how the retailers do see the use of the different technologies in the supply chain. For each technology, there should therefore be questions about where in the supply chain the technology should be used and who should be allowed to see the results.

Questions/subject, which should be part of the in-depth interview

In which part of the supply chain could the technology be useful? And for which purposes?



Transport -----

Where should the consumer have access to the results, if at all?

Report on Retail Survey Results

4.1.3 Expiry date (fixed) contra information from the indicator or sensor

In the Retail Study there was a mixed feed back of how important the fact is that a result from the indicator or sensor can show another result than the fixed expiry date on the product.

This could give some problems if the consumer is met with two different dates at the same time. Which one should she/he believe? The consumer would maybe choose another brand. This could both mean loose of sale and a bad/confusing image of the brand owner and even the retailer..

If an indicator or sensor is used on a product in a store and it shows for instance a colour changes. How shall the retailer react? And also very important, if the indicator/sensor shows that the product is okay when it leaves the store, what about claims, which might come, when the consumer gets home?

Questions/subject, which should be part of the in-depth interview

How can the retailer (and the brand owner) avoid “confusing” the consumer with e.g. two different expiry dates?

How shall the retailer deal with items, which show sign of i.e. colour change, in the store and after the products have left the store?

4.2 Structure frame for the interviews

Please find the Structure frame in Appendix A.

4.3 Selection of the retailers to do the interview

The retailers, who participated in the Retail Survey, were contacted for an in-depth interview. Retailers, to whom we either had a phone number or to whom it was possible to find the phone number, were connected by phone to ask for the participation and for agreeing on at date and time, where the interview should take place. To the participant where the phone number was not available, an email was sent.

The Retail Survey was conducted in the autumn of 2004. The contacts from that time do not necessary still work in the company and some tracks ended blind and not everybody did want to participate again. Three retailers kindly agreed to do the interview.

Report on Retail Survey Results

It was then necessary to find retailers, which did not participate in the Retail Survey. However, even with help from helpful contact, it has not been possible to get one more interview. There have been several reasons; the lack of time issue and no willingness to talk about these issues can be mentioned.

5. In-depth interviews

The interviews are to be conducted by phone and have been made to last about 15-20 minutes. To secure that all information is rendered correctly, a second person from Danish Technological Institute is present during the phone interviews.

5.1 Results

The issues in each sub-chapter are explained, followed by the results and statement for each technology. The results are summarized in a situation overview in chapter 5.2.

A more specific explanation of the different technologies.

The interviewees were firstly asked if they know the specific technology. If it was not the case, the idea behind the technology was explained together with some examples how the technology could be used.

Present level in company in relation to each technology

No knowledge of the technology

Know the technology

Have tested it.

(0) No

(1) in test right now,

(2) test + implementing

(3) test + disregarding.

Ad. 0 Any plans?

Ad. 2 Specific uses?

Ad. 3 Why?

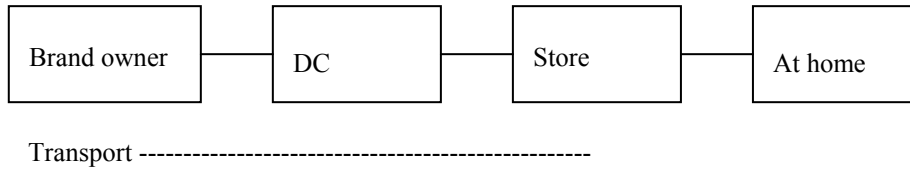
In the Retail Survey, questions about the present level of the specific technology in the company were asked. In the in-depth interview it is possible to ask more closely about the reasons for not having worked/tested the technology, and if they have worked/tested it, what experiences do they have and the reason for implementing or disregarding the technology on the basis of the experience.

Rating of importance now and in the future for each technology (1-5, where 1 is not important and 5 is very important)

To understand how the company see each technology now and in the future.

Report on Retail Survey Results

In which part of the supply chain could the technology be useful? And for which purposes?



Where should the consumer have access to the results, if at all?

These questions are asked to understand how the retailers see the possibilities for each technology and also understand how the retailers’ attitude towards accessibility of the technology to the consumer is.

How can the retailer (and the brand owner) avoid “confusing” the consumer with e.g. two different expiry dates?

How shall the retailer deal with items, which show sign of i.e. colour change, in the store and after the products have left the store?

5.1.1 Results on general assessment of the different technologies

TTIs

All retailers know the technology.

One retailer has tested the technology in a small scale. In the beginning it looked very promising, but after a lot of discussion, too many questions turned up. For instance; what to do with a colour change, what about increased waste, is the technology reliable?

One retailer has tested TTIs and is considering using the technology on certain product groups, such as fish and poultry.

Not sure if the technology has been tested.

Not important now, a little bit more important in the future.

Not so important now, probably in the future.

A rather important technology now and in the future, at least on selected product groups.

Report on Retail Survey Results

Leak Indicators

Few retailers know the technology.

Do not think that it will be interesting for the consumer.

Interesting for some kind of food product, for instance meat and poultry.

Do not believe it will be interesting. If interesting, then maybe on meat and fish

The problem is not considered to be so big at for instance brand owners, who would rather solve any problems in another way.

The technology is rather high rated.

The technology is rated low importance now and in the future.

Low rating now and also in the future.

Freshness Indicators

Most retailers know the technology.

Tested it in a small scale, but are not going to implement the technology.

The technology sounds interesting.

Only on certain products – about 10%.

Importance now: 1 and importance in the future about 2-3.

Not important now, but more in the future.

Medium important now, a little more in the future.

Bio Sensors

Interesting for example with salmonella, but it must be an approved technology and according to standardisation.

Not a big issue.

Not important now, could be in the future.

Not important now, but perhaps more in the future.

Report on Retail Survey Results

For the consumer low now and in the future.

For the B2B actors about 3 now and in the future.

Light Indicators

The technology is not known to the retailers.

Do not think it is a necessary technology.

Have no interest in the technology.

Difficult to estimate the importance now and in the future.

The problem is small now.

Low rated.

Low rated.

Logistic Indicators (RFID)

All retailers know the technology.

Have tested some.

Both now and even more in the future, traceability is a major issue, where this technology can be helpful.

Talking about it, but have not tested it yet.

Both now and even more in the future, traceability is a major issue, where this technology can be helpful.

Not important for the consumer 1 neither now nor in the future.

Important for the supply chain actors now and very important in the future.

Interesting and important, but mostly in the supply chain.

Important now, even more in the future.

Relative Humidity Sensors

Report on Retail Survey Results

Little knowledge of the technology.

Such an indicator might be a good idea.

Have talked about it, but it is rated low now and in the future. If interesting, then for i.e. fruits.

Maybe interesting in the future, not now.

RFID – extended use

The retailers are not so familiar with the technology and have not tested it.

Probably what the future will bring.

Will be interesting in the future.

Gives a lot of possibilities in the future.

High rating for the future.

Maturity sensors

Little knowledge of the technology.

Exiting technology, which could be used for instance on exotic fruits.

Could be interesting in the future.

Good idea, but it seems to be too expensive.

Low rating now and in the future.

Could still give some misunderstandings when the consumer is at home and the sensor changes.

Report on Retail Survey Results

5.1.2 Results on consumer acceptance contra inaccessibility of the indicator or sensor to the consumers

TTIs

The technology suits B2B.

At the brand owner, DC and when the products arrive in the store, not to the consumers. Unless the consumer demands it in the future.

Consumers should not have access to read the TTIs, B2B only.

From the brand owner to the store. Might think of using the technology in the store on own brand.

Leak Indicators

Do not think that it will be interesting for the consumer.

In the supply chain until the store, okay at the door of the store.

Not for the consumer.

The technology could be used in the B2B area, from up-stream supplier to retailers DC, maybe also the receiving area in the store.

The consumer should not have access to read the indicators, B2B actors only.

To the arrival in the store.

Freshness Indicators

In B2B it is certainly a good idea, more unsure when it comes to the consumer.

If it is possible to see the indicator as a positive thing and not as there is something wrong with the product.

In the supply chain into the store (control), but not to the consumer.

The entire chain.

Bio Sensors

B2B actors could use the technology.

Report on Retail Survey Results

Only B2B actors should be able to read the sensors.

The technology could be use in the retailers DCs and in the store. Unsure about the consumers.

To the arrival in the store.

Light Indicators

Do not believe in the technology and therefore it is difficult to see where to use it in the supply chain.

Maybe in the store.

If it has to be used, then it must be in the stores. This needs education.

Logistic Indicators (RFID)

Supply chain actors, from up-stream supplier to the store.

Do not thing that it will be interesting for the consumer, so only accessible to the supply chain actors.

In the supply chain, not to the consumer.

From warehouse to the stores.

Relative Humidity Sensors

The technology is more likely to be used in the supply chain, than in the store.

In the supply chain, not for the consumer.

Supply chain, but not in the store.

RFID – extended use

Again a technology, which should be used in the supply chain.

Not for the consumers, but to the control in the store.

For the supply chain actors, maybe even for the consumer.

Report on Retail Survey Results

Maturity sensors

Both interesting for the supply chain and the consumer.

In the retailers DCs, in the store and at home.

5.1.3 Results on expiry date (fixed) contra information from the indicator or sensor

It is important that the consumers understand the functions of the indicators and sensors. Otherwise it will only be a confusing element, which might give some bad will to both the brand and the retailer.

It is to big risk that the consumer does not understand the message from the indicators or sensors.

Indicators and sensors are likely to cause a lot of questions in the store, which can be difficult when there is different information on the packaging. This can create frustrations.

The indicators or sensors must be “deactivated” when leaving the shop. Otherwise it can be difficult to prove where and when i.e. an indicator has changed colour.

One could be afraid that the consumers do not understand the signals from indicators or sensors. This is crucial that the consumer understand the technology, if they are presented to them

Afraid that it will be a topic of discussion in the store.

The fact that different information can occur on the packaging (with can result in confusion) is a main issue that has to be taken care of.

Important that the consumers do not get confused.

What about i.e. a colour change, when the consumer has left the store?

5.1.4 General statements on indicators and sensors

- Our company would rather use the resources to improve the existing supply chain
- In EU there are laws, which demand that temperature is to be measured in a certain way. Therefore, systems are likely to be build to meet the legislation

Report on Retail Survey Results

- If applying indicators or sensors to products is such a good idea, why have not more retailers implemented these technologies?
- Indicators and sensors, which show if something is wrong with the product, are difficult to show to the consumer. If the consumers do not understand the signal from the indicator, it can damage both brand owner and retailer
- Indicators and sensors, which show if something is wrong with the product, are likely to be use in B2B, from the up-stream suppliers to the brand owner to the retailers distribution centres
- Could give some misunderstandings when the consumer is at home and the sensor changes
- Would maybe use an indicator, that can be used positively (opposite of indicators, which show when something is wrong), for instance a maturity sensor. It is of major concern having indicators showing if something wrong, in the store
- Prefer better control within the exiting systems than to introduce new technology
- Important that the technologies can be used directly in existing quality systems
- The indicators can perhaps be used as a competitive device
- Maybe a way of telling the consumers that a lot of attention is on food quality. Now it is difficult to show that a lot of work is put into this area
- The technologies can be used to secure traceability, which is very important now and even more in the future
- The technologies are more likely to be used in the supply chain and not to the consumer. More likely on pallets and cases and not the consumer package
- The technologies are not likely to come right now, maybe in 10 years
- Important not to confuse the consumer with more expiry dates. It must be kept simple, in order not to add mistrust towards the brand and/or the store
- Crucial that the technology is so good that it can be trusted at all time

Report on Retail Survey Results

5.2 Situation overview

General assessment of the different technologies

The technologies were rated as follows:

<u>Technology</u>	<u>Now</u>	<u>In the future</u>
TTIs	low/medium	medium/high
Leak	low/medium	low/medium
Freshness	low/medium	medium
Bio	low/medium	medium
Light	low	low/medium
RFID	medium	high
RH	low	low/medium
RFID – extended	low	medium/high
Maturity	low	medium

Expiry date (fixed) contra information from the indicator or sensor

The fact that different information can occur on one package (with can result in confusion) is a main issue that has to be taken care of.

It is important that the consumers understand the functions of the indicators and sensors. Otherwise it will only be a confusing element, which might give bad-will to the brand and the retailer.

The consumer must also know what to do, when the indicator changes colour at home.

Consumer acceptance contra inaccessibility of the indicator or sensor to the consumers

The retailers are more positive to the indicators, when it comes to supply chain issues and less, when it comes to making them accessible for the consumer.

It is to big a risk for both brand owner and retailer, if the consumer can access the technology, unless the technology is totally reliable. Mistakes will damage the image of both brand owner and retailer.

General statements on indicators and sensors

The retailers already have systems that are checking i.e. the cooling chain and some are more interested in improving the existing system instead of implementing new technology.

The retailers are more positive to the indicators, when it comes to supply chain issues and less, when it comes to making them accessible for the consumer.

Report on Retail Survey Results

The retailers see the technologies on pallets and cases and not the consumer pack-
age.

The retailers are worried that the uses of indicators or sensors in the store will lead to too many questions and matters of dispute. This will both be a problem in the store, but also after the buy, when for instance an indicator change colour at the consumers house. The solution could be a deactivation of the indicator, when leaving the store.

If a technology should be used in the store, it is crucial that the technology can be trusted. The technology must be reliable.

It is to big a risk that the consumers do not understand the functions of the technologies. Education will be necessary.

Technology, which can be used positively (opposite of indicators, which show when something is wrong), for instance a maturity sensor, could be interesting.

It is of major concern to have indicators showing if something wrong, in the store.

Report on Retail Survey Results

6. Answers compared to the Retail Survey

In the retail survey, the different technologies were rated as follows for the future. This compared to the results from this report.

<u><i>This report</i></u>		<u><i>Retail Survey</i></u>
RFID	high	RFID
TTIs	medium/high	Leak
RFID (extended)	medium/high	Freshness
Maturity	medium	Bio
Freshness	medium	TTIs
Bio	medium	RFID extended
Leak	low/medium	Maturity
Light	low/medium	Light
RH	low/medium	RH

The difference between the two surveys is small. It is still the most “common known” technologies, which are rated the highest. Even though the technologies were explained more in details during the in-depth interviews, the over all rating did not change considerably. This can of course be due to the fact that it is difficult to see the possibilities from an explanation or that the knowledge still is too little to change the perception or more likely, it does reflect the retailers’ thinking about the importance of the different technologies.

RFID is the highest rated in both surveys. In this survey followed by TTIs and RFID extended. RFID can be used on all products, whereas TTIs and RFID extended will be limited to the cooling chain.

The maturity sensor has climbed up, which might be due to the fact that the sensor can be used in a positive way, that is not telling something is wrong, but indicating a maturity level.

Leak is rated less important in the interviews than in the retail survey. The reason for that could be that the problem is not yet realized in the supply chain.

Light and RH are lowest rated in both surveys.

In the retail survey, the retailers suggested that the technology should mainly be used within the logistics area on pallets and cases. There is nothing in this survey that contradicts those statements. However, some retailers are open to use for instance maturity sensors or other technologies, which somehow (only) can be used in a positive way. That is, not telling that something is wrong, but more being an added value to the consumer.

Report on Retail Survey Results

To allow consumers at all to the technologies, it is of highest importance that the technologies can be trusted.

In the survey there was a contradiction between the fact that retailers do not want consumers to read the indicators, but still wanted their “consumer acceptance”.

If the consumers are to see the indicators, it is important that the consumers understand the functions of the indicators and sensors. Otherwise it will only be a confusing element, which might give some bad will to the brand and the retailer.

It is crucial that the consumer understand the technologies, if they are presented to them. Then, the consumer has to be educated to understand the functions of the specific indicator or sensor.

The fact that different information can occur on the packaging (with can result in confusion) is a main issue that has to be taken care of, if a technology shall be implemented.

The issue that an indicator can change colour after having left the store is also a major topic. The retailers want to avoid disputes with claims because changes in the indicators signal after.

In other words, the retailers are concerned that the indicators will create unnecessary losses and extra service time in relation to the consumers.

Report on Retail Survey Results

7. Conclusion

The difference between the two surveys is small. It is still the most “common known” technologies, which are rated the highest. Even though the technologies were explained more in details during the in-depth interviews, the over all rating did not change considerably. This can of course be due to the fact that it is difficult to see the possibilities from an explanation or that the knowledge still is too little to change the perception. RFID is the highest rated in both surveys. In this survey followed by TTIs and RFID extended. RFID can be used on all products, whereas TTIs and RFID extended will be limited to the cooling chain.

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If the consumers at all should be allowed to access the technologies, it is of highest importance that the technologies can be trusted.

In the survey there was a contradiction between the fact that retailers do not want consumers to read the indicators, but still wanted their “consumer acceptance”.

If the consumers are to see the indicators, it is important that the consumers understand the functions of the indicators and sensors. Otherwise it will only be a confusing element, which might give some bad will to the brand and the retailer.

It is crucial that the consumer understand the technologies, if they are presented to them. Then, the consumer has to be educated to understand the functions of the specific indicator or sensor.

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The issue that an indicator can change colour after having left the store is also a major topic. The retailers want to avoid disputes with claims because an indicator can change signal after having left the store.

Report on Retail Survey Results

Even though the following in-depth interviews were conducted in a relatively small number, the results do not differ considerably from the Retail Survey and the results can therefore be considered representative to retailers' attitude towards the questioned issues.

Report on Retail Survey Results

Appendix

Appendix A Structure frame

Report on Retail Survey Results

Appendix A - Structure frame for the interviews

Company _____
 Name _____

Interview conducted by _____
 Company _____
 Others _____
 Company _____

Date _____

There will be asked the same questions for each technology, here showed as an example with TTI. In the end of the interview, the companies will be asked general questions about the problem with the results of the indicator or sensors that can overrule a fixed expiry date.

Example – TTI, Time Temperature Indicators (TTI)

The TTI Technology measures and monitors, if a specific product has been kept within the required temperatures in the entire cooling chain. The technology could be based on a colour change.

Knowledge of TTI in the Company and present level

- No knowledge of the technology
- Know the technology
- We have tested it
 - (0) no, not tested
Any plans?

 - (1) in test right now,
 (2) tested + implemented
For which use?

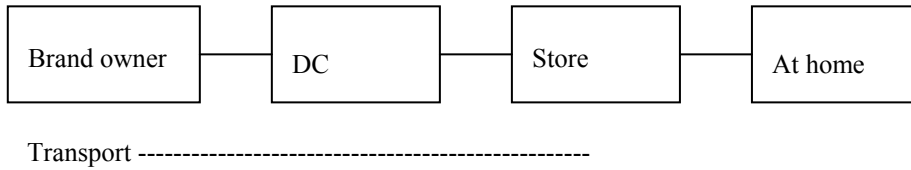
 - (3) tested + disregarded
Why was it disregarded?

How important is TTI for us now and in the future?

Rated from 1-5 (1 not important, 5 very important)

Report on Retail Survey Results

In which part of the supply chain could the technology be useful?



Where should the consumer have access to the results, if at all?

In general - Expiry date

How can the retailer (and the brand owner) avoid “confusing” the consumer with e.g. two different expiry dates?

How shall the retailer deal with items, which show sign of i.e. colour change, in the store and after the products have left the store?
