ONLINE BUYING BEHAVIOR OF PACKAGING BUYERS IN 2015

April 2015

Is the internet nurturing a new breed of Packaging buyers?

Fontys University of Applied Sciences

PACKAGING DIGEST

packaging europe

ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

We investigated the online buying behavior of 153 qualified business to business buyers of packaging solutions from over 20 countries. The respondents all bought a packaging product, service, or solution the past 12 months and tried to use the Internet to facilitate the purchase.

The research asked the buyers 22 questions about the purchase that they made. Questions ranged from simple demographics, to more complicated ratings of the utility and quality of the information they sought online. There were 3 specific questions about the use of social media during the buying process. Our key findings were:

- Many B2B purchasing behavior research efforts ignore or marginalize inputs from the actual purchasing teams, or don't focus enough on the particularities of the packaging industries.
- Over 78% of the buyers did not use Facebook and more than 83% did not use Twitter to facilitate their buying process
- Many buyers reported it took too much effort to locate some information online. The median rating on a scale of 1.0 – 10.0 was less than 6.0 for information such as: industry analyst reports, industry competitive information, and technology primers.
- Over 1/3 of the buyers rated the reputation vendor pricing information less than 6.0 on a scale of 10.0 with reputation defined as: instills confidence, trustworthy and credible. One could argue that some members of the vendor community has some work to do to improve upon this.
- About 1/3 of the buyers find the intent of information posted online is not transparent and supportive enough. These buyers rated the intent of such information below 6.0 on a scale of 10.0
- At smaller companies employing less than 100 people, 50% of the buyers report that their first choice for sharing the information they collected online is verbally. The second most common method is email. Intranets, social media, or print-outs don't play a big role.
- 50 % of buyers report that they did not derive any benefits from social media when making purchasing decisions for their company, 13% did not know, but 37% did derive benefits, such as speeding up the process
- The smoothness ratings of buying processes using the Internet as an aid was not influenced by most buyer roles, social media usage, or size of budget. However dissatisfied buyers (ratings less than 6.0 on a scale of 10.0) tended to be disproportionately Influencers who used the Internet for defining needs, final vendor selection, and watched more videos.

Online Buying Behavior of Packaging Buyers in 2015

IS THE INTERNET NURTURING A NEW BREED OF PACKAGING BUYERS?

1.0 INTRODUCTION – MOTIVATIONS, GOALS, AMBITIONS

Why this research?

Complex industrial buying practices have undergone significant changes over the past 20 years with the proliferation of Internet usage within businesses. One major change which has occurred revolves around the way businesses now go about purchasing complex capital equipment or services in the packaging industries. In the past, suppliers or sellers employed many sales people who engaged prospects or customers early on in the buyer's purchasing cycle/journey. These sales people interacted with prospects or customers using tried and proven methods such as telephone calls, face to face meetings, and live events – such as trade shows. These methods of sales are still valid today. But the acceptance of such direct sales methods, their need, desirability, timing, by online business to business (B2B) buyers continuously changes with the evolution of the Internet. Modern B2B buyers, and packaging buying teams now frequently delay their first interactions with sales people until they complete about 60% of their purchase process (Corporate Executive Board, 2011). One can hypothesize that a majority of the buying team's time is spent online researching various aspects of the purchase , and discussing findings online with each other in real time. These are the new realities of modern online buying team's behavior.

One significant problem that buying teams face is information overload. The problem of the modern B2B packaging capital equipment or service buyer is not lack of information. In fact it's the opposite – information overload. Even when buying teams use social channels and their own personal online networks to gather information, often they are overwhelmed by the magnitude of the conversations and opinions available on a particular issue, topic, product or service. This research effort attempts to get a grasp of the buying team's purchasing dilemmas when starting and continuing a significant purchasing decision online. Sharing such findings with vendors should enable the vendors to better service the packaging buyer's needs, desires, and buying journey, resulting in time and effort savings by both parties.

With the advent of new online B2B purchasing behavior, suppliers also changed their marketing and sales strategies and tactics. There are a multitude of applied and some academic research reports about these new vendor strategies and tactics (Schwartz, 2011); (BaseOne, 2012); (Brinkmann, 2012); (DemandGen, 2013); (Giunipero, 2013). Besides these reports, numerous vendor associations and specialized industrial online media publishers also conduct surveys and publish focused results of online marketing push strategies or tactics of their members or readers. The net result of such studies is often that *more is better*, meaning that the more online content and distribution channels that vendors use to reach and service packaging buyers the better. In this study, we explore if this is really true. The value of the study for vendors lies in highlighting how they can better manage and justify their online content production and distribution efforts and resources. This is especially important for vendors with limited resources as the number of online channels continues to grow each year.

Many B2B purchasing behavior research efforts ignore or marginalize inputs from the actual purchasing teams, or don't focus enough on the particularities of the packaging industries.

Key Research Objectives

During this study the researchers strived to understand how groups of people in packaging companies (such as consumer goods; food; but also industrial products) make purchasing decisions about capital equipment or services., We strived to better understand the how people utilize online information sources individually and as groups to make such purchase decisions. Significant efforts focused on the use of social media and digital/online sharing of information for such tasks.

These key research objectives were:

- Results should enable buying teams to gain insights into the online behavior of colleagues during complex, sometimes lengthy buying cycles. Who is using online information sources; during what phases of the buying cycle are these people using online sources; which kinds of online resources are commonly used?
- Determine if there are significant differences of online behavior and social media usage by 6 different types of buying team members.
- Results should enable buying teams to benchmark their own online behaviors against similar industry practices and other competitive buying teams.
- The results should deliver objective data reported by actual purchasers using online sources reported by themselves directly. Thus no secondary or

inferential data will be used – such as buyer's journeys provided by suppliers or online content consumption routinely published by the suppliers in the industry.

- Identify one to two additional key needs or insights about online purchasing behavior of capital goods/services in the packaging industries that act as seeds for follow-up studies.
- Enable vendors to better optimize their online content production and distribution tactics thereby saving themselves money and resources and improving the buying process for their valuable customers.

2.0 RESEARCH METHODS SYNOPSIS

The survey ran from mid November 2014 through the first week of February 2015. The survey consisted of 2 qualifying questions, and an additional 22 questions about the respondent's demographic background and his/her use of the Internet to facilitate a recent packaging related purchase.

Prospective participants were recruited using methods explained below in Section 3.0. The survey was presented online as a serious of web pages. Participants could move forward and backward through the survey questions. The following types of questions were used to collect information:

- Open text answers
- Multiple choice or multiple answers from a choice
- Ranking
- Rating variables using sliding numeric scales from 1.0 – 10.0

Some questions required answers in order to continue, while others did not. The survey questions were formulated by the authors with input from the 2 sponsoring publishers. Initial draft questions were tested on 10 volunteers recruited within the industry. The entire survey was estimated to take about 20 – 25 minutes to fill out. The survey was only offered in the English language. Since we sought and got input from around the world (see Appendix 2), there could be some bias in the results due to language difficulties. Once the survey was closed in February 2015, data processing began using built in functions in the survey tool, IBMS SPSS Statistics[1], R statistics language[2] and Microsoft Excel.

[1] **Statistical Package for the Social Sciences**
[2] See: http://www.r-project.org/

3.0 SAMPLE FRAME, SIZE, AND VALIDITY

The ***sample frame*** for the survey consists of all people working in the packaging industries worldwide who could be reached via digital means. However the survey ***target population*** focused on people who actually bought some kind of packaging product, service or solution in the past 12 months (with the 12 month time frame relative to the day the survey was filled in). In addition, the purchase process needed to include the Internet in some way or means.

To better understand the target population please refer to Figure 4 the packaging industries ecosystem diagram. The industry is characterized by 4 different types of members:

- Influencers
- Suppliers
- Packaging Process Owners (Manufacturers of Goods or Contract Packagers)
- End consumers (B2C and B2B)

The relationships between these members are highlighted by the arrows in the diagram, showing how each member influences and enables the final output – packaged products. There are many names, terms, and definitions possible for the multitude of people who are involved with the entire packaging process. The diagram is not meant to be exhaustive.

The target population for the study focused on people who work for a manufacturer of goods or a contract manufacturer. These people are represented inside the blue rectangle in Figure 1. However, it is entirely possible that a few respondents came from the suppliers part of the ecosystem. The reason that there could be respondents from the suppliers part of the ecosystem stems from the fact that many times designers, engineers, process experts also look in the packaging industry for components, subassemblies, expertise, inspiration, or other companies to partner with to provide a packaging solution.

The Frame Population for the study consisted of all of the potential buyers we could reach via one of these 3 methods:

- Direct personal emails sent to subscribers of our sponsors (+66K)
- Promotional webpage postings on Packaging Europe's Website
- Personal promotion via targeted Linkedin groups and certain key Twitter Association accounts and key influencer in the industry.

Thus any person who received the promotional email, saw the articles or banners advertising the survey, or received notice indirectly via Linkedin or Twitter was a potential candidate for the survey.

The ***Sample*** was not actively selected from the frame population, as participation was voluntary. Figure 1 recaps the sample size and actual final number of ***Qualified Respondents***. In total 470 people read the introductory page of the survey. Fifty

people did not go further. Thus 420 people started the survey, by answering 2 qualifying questions.

1. Were you involved in the purchase of a business-to-business (B2B) packaging solution, product, or service the past 12 months?
2. During the purchase process in the past 12 months, did you use any online internet information sources or online services (such as Linkedin, social media) to help you with the purchase?

From this group 10 people dropped out before answering the qualification questions. One hundred forty four people answered no to question 1. Of the 267 people who did buy something the past 12 months**, 116 (43.4%) said they did not use the internet during the purchasing process.** This fact in itself is interesting. However we did not pursue these 116 disqualified purchasers asking why they did not use the Internet during the purchasing process.

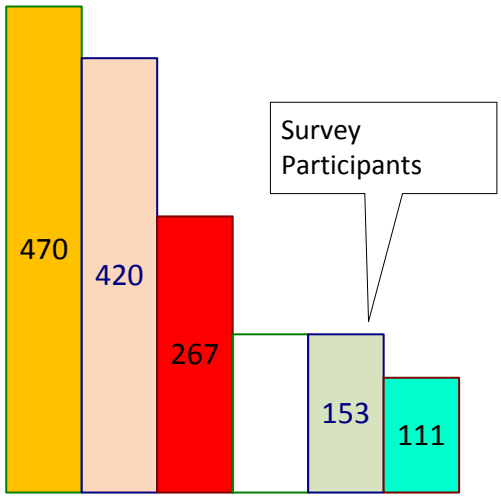

FIGURE 1 SAMPLE SIZE

This left 153 qualified respondents who were then presented a series of 22 questions. During the survey, 42 people quit after various questions leaving us with 111 people who completed the entire survey.

Validity:

The validity of the survey was tested using 2 known metrics coming from the Packaging Digest reader database. The functional titles of the survey participants and sizes of the companies that they work at were used to check the validity of the returned data. The key question is: *are the qualified respondents a representative sample of the general population of packaging buyers in the industry in 2014?*

There are several ways to check the answer to the above question. One common method is to use a Chi-Squared statistical test comparing the reported percentages of each person's title or the number of employees at the company compared to the reference data from Packaging Digest. The Packaging Digest database consists of over 60,000 qualified readers who reported such information. Unfortunately our survey population was limited to 142 job titles, and only 117 reports about company size. The small sample size limits the utility of the Chi-Squared measurement.

Normally Chi-Squared testing requires numerous responses in each category (normally >5) for the test to be reliable. In fact many statistical practitioners recommend more than 100 responses as a minimum for each category. Our sample did not provide enough responses to meet this requirement as can be seen in Tables 1 and 2.

Job Title	Count	Percent from survey	Percent Packaging Digest
Owner or Executive Management	40	28.2%	34.0%
Brand or Product Management	5	3.5%	1.0%
Sales / Business Development / Marketing	12	8.5%	8.0%
Purchasing	20	14.1%	6.0%
Research and Development	6	4.2%	7.0%
Packaging Design	2	1.4%	3.0%
Engineering - Packaging	16	11.3%	3.0%
Engineering - Product Design	3	2.1%	2.0%
Engineering - Projects or Processes	17	12.0%	3.0%
Manufacturing or Production / Operations	14	9.9%	11.0%
other	7	4.9%	22.0%
Totals:	142	100.1%	100%

TABLE 1 COMPARISON JOB TITLES SURVEY VS REFERENCE DATABASE

# of Employees Worldwide	Count	Percent from Survey	Percent Packaging Digest
Fewer than 50	43	36.8%	30.0%
50-99	9	7.7%	16.0%
100-499	28	23.9%	20.0%
500-999	9	7.7%	7.0%
+1000	28	23.9%	27.0%
Totals:	117	100.0%	100.0%

TABLE 2 COMPARISON COMPANY SIZE SURVEY VS REFERENCE DATABASE

We thus decided to compare the sample population to the reference population using cumulative measures. In Figures 2 and 3 below the 2 plots are shown. There are differences between the survey population and the reference population, but the differences are quite reasonable. Thus we conclude that the sample population (respondents) are representative over the 2 measures which we could control.

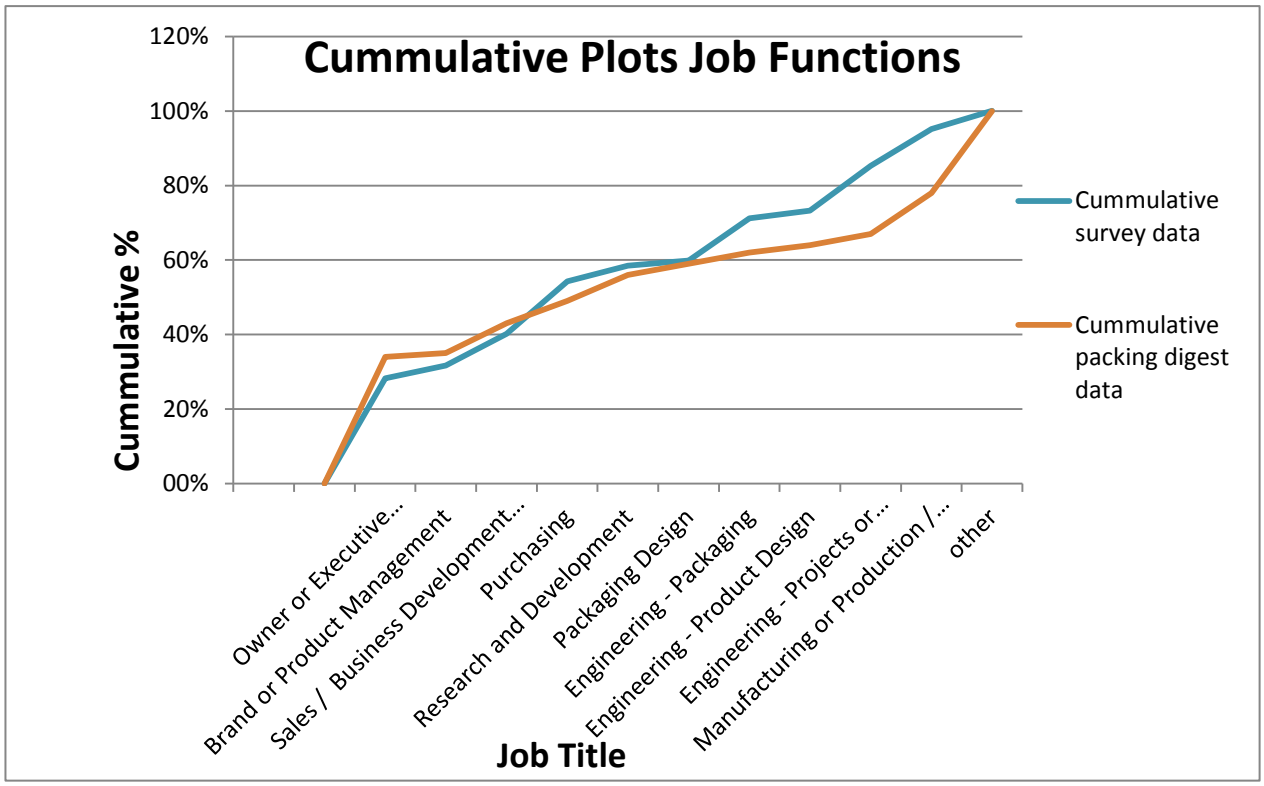

FIGURE 2 CUMMLATIVE JOB FUNCTION PLOTS

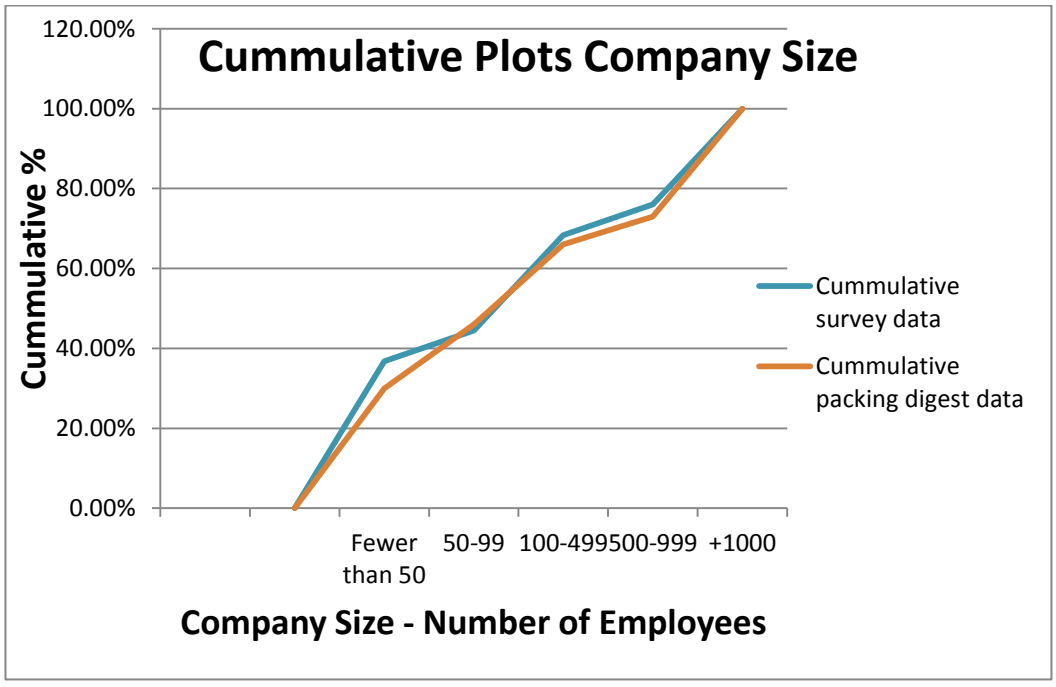

FIGURE 3 CUMMULATIVE COMPANY SIZE PLOTS

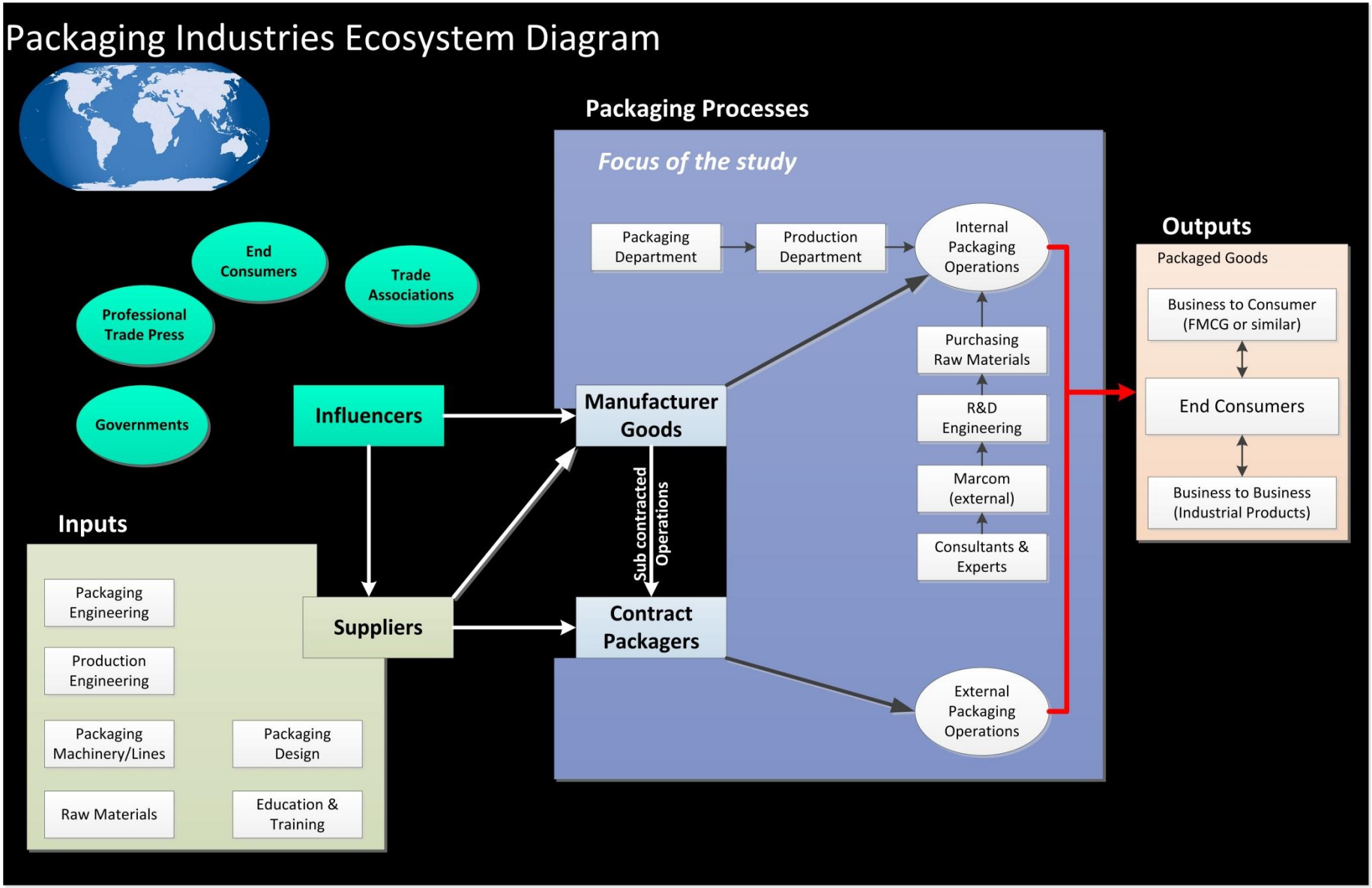

Figure 4 Explanation of Sample Target Population

4.0 CHARACTERIZING THE NATURE OF THE PURCHASE

The survey asked 10 demographics questions to help characterize the population and the nature of the purchase. These characteristics are used in Section 5 of the report to explore how demographic variables may moderate buying behavior. We present 4 of the demographic variables here, with the remainder shown in Appendix 1.

The first demographic variable asked what kind of product or service or packaging solutions did the buyer(s) seek. There were 6 choices as shown in Figure 5 . Respondents were allowed to pick more than 1 answer, and thus the 138 respondents indicated 247 different choices in the figure. A majority were looking for packaging materials (103), and many sought packaging equipment or machines (55).

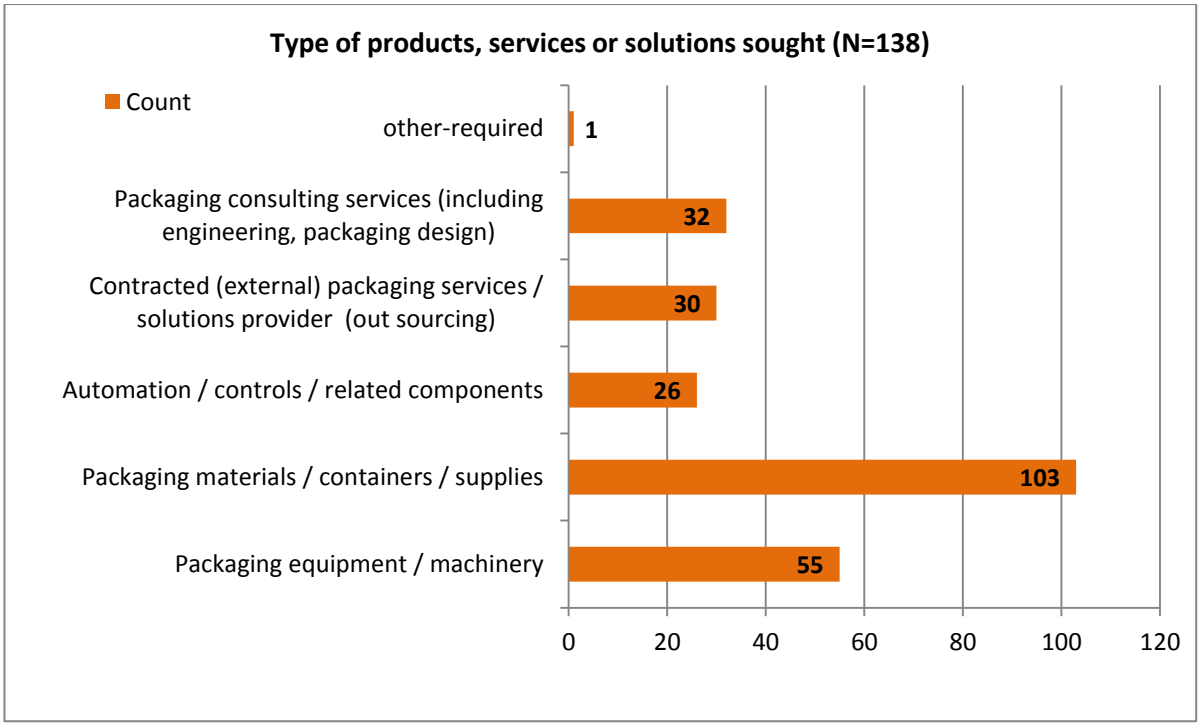

FIGURE 5 TYPE OF PRODUCT, SERVICE, OR SOLUTIONS SOUGHT BY BUYERS

Next we consider the effect of the number of persons involved in the purchasing decision. There were 5 possible answers as shown in Figure 6 ranging from only the respondent to more than 12 other people. Of the 140 people answering this question, most of the buys (86) involved 2 – 5 other people. This is important, as later in Section 5.5 we want to explore the main methods of sharing information with colleagues.

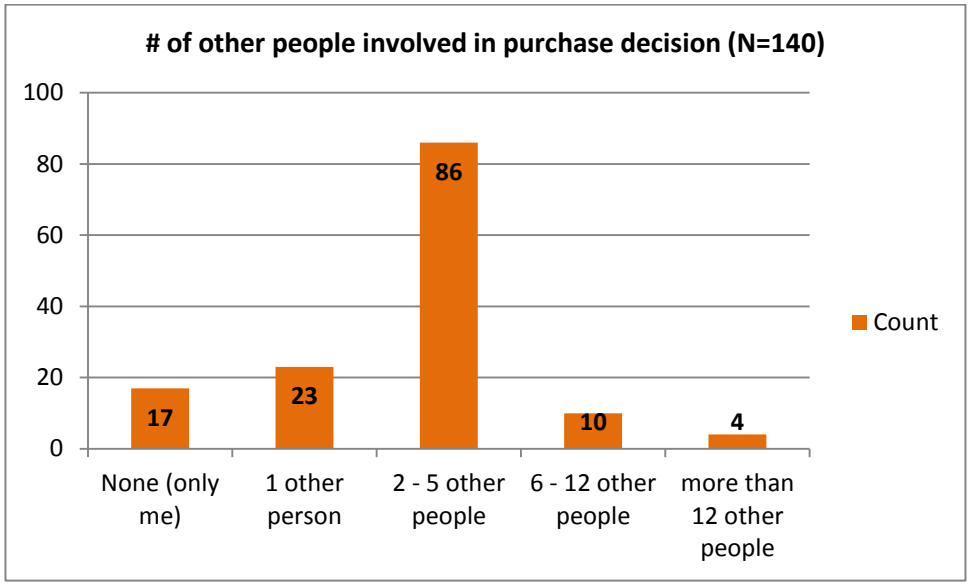

FIGURE 6 NUMBER OF PEOPLE INVOLVED IN PURCHASE DECISION

The need and propensity of using online resources may be influenced by how often the product or solution is sought. We suggest that people may behave different if they are buying something for the first time, or infrequently versus something they buy more routinely. We defined 4 frequency periods as shown in Figure 7: first time; less than once a year; 1 – 2 times a year; and repeat buy numerous times per year. The number of first time buyers was small (13), while the number of buyers increased as the frequency of the buy increased. This is not too surprising, as many of the buyers (over 60% - see Appendix 1) had over 10 years of experience in the packaging industry.

Lastly, we also wanted to explore the influence of the size of the budget on online behavior. There were 6 possible budget categories ranging from unknown to over $6M (USD) as shown in Figure 8. Of the 139 responses, most budgets were for less than $1M or unknown, but 15 people indicated budgets exceeding $1M.

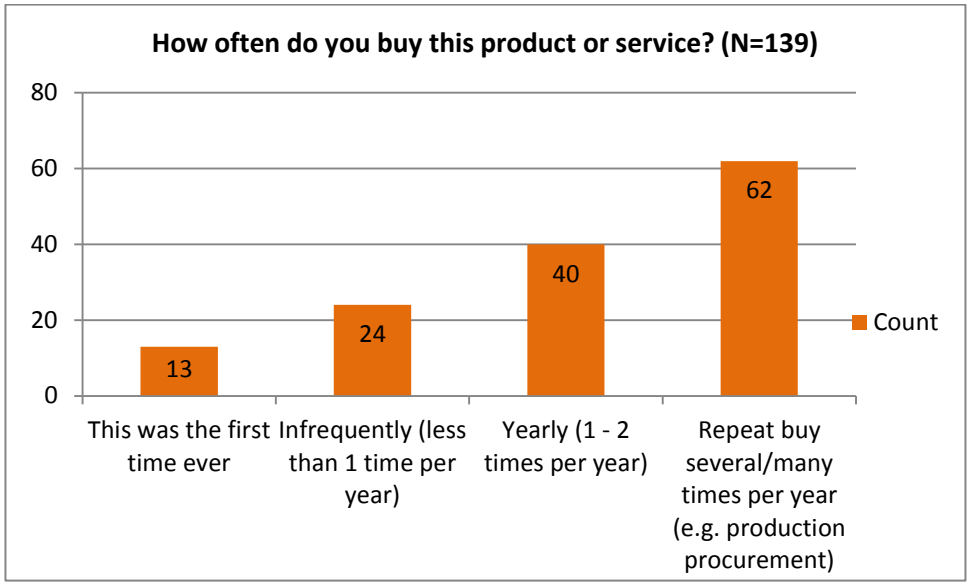

FIGURE 7 FREQUENCY OF THE PURCHASE

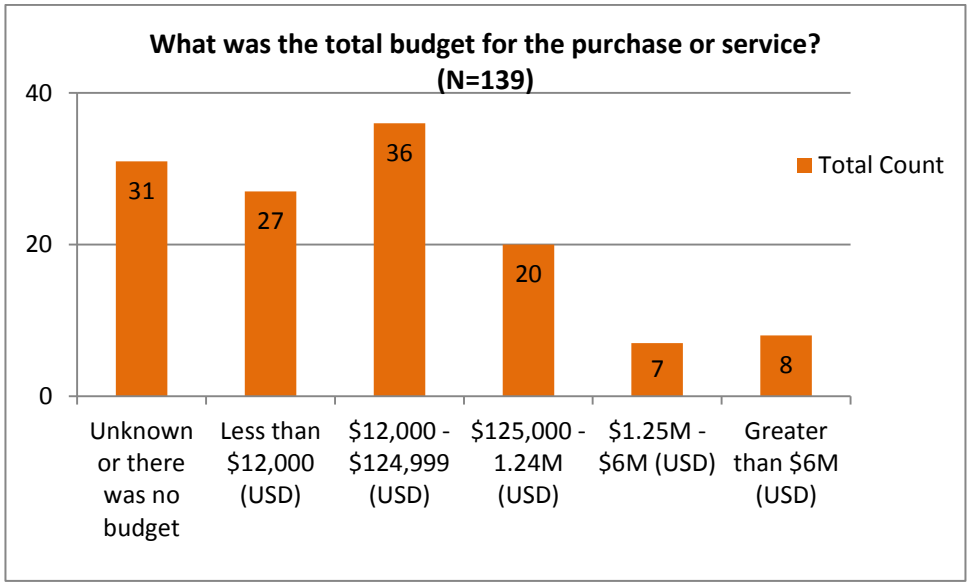

FIGURE 8 BUGET FOR THE PURCHASE OR SERVICE

4.1 Buyer Roles

Many business buyer behavior research studies commonly segment buyers into several *buyer roles*, see for example (Frederick C. Webster, April 1972), (Kreutzer, 2010, p. 32), (Kotler, 2012, pp. 188-189).

We asked respondents what their primary buyer role was in the decision-making process for the purchase considered in the survey. There were 6 possible choices and the category "other" as shown in Figure 9. The roles were further clarified with the text shown here below in parenthesis. Respondents were required to pick one choice.

- Initiator (requesting the purchase for 1st time)
- Gatekeeper (controlling information)
- Influencer (internal or external expert, stakeholder)
- User (using the purchased product or service)
- Decider (budget owner, having final decision authority to approve purchase)
- Buyer (being formal authority to arrange purchase, purchasing agent)
- Other, (please specify)

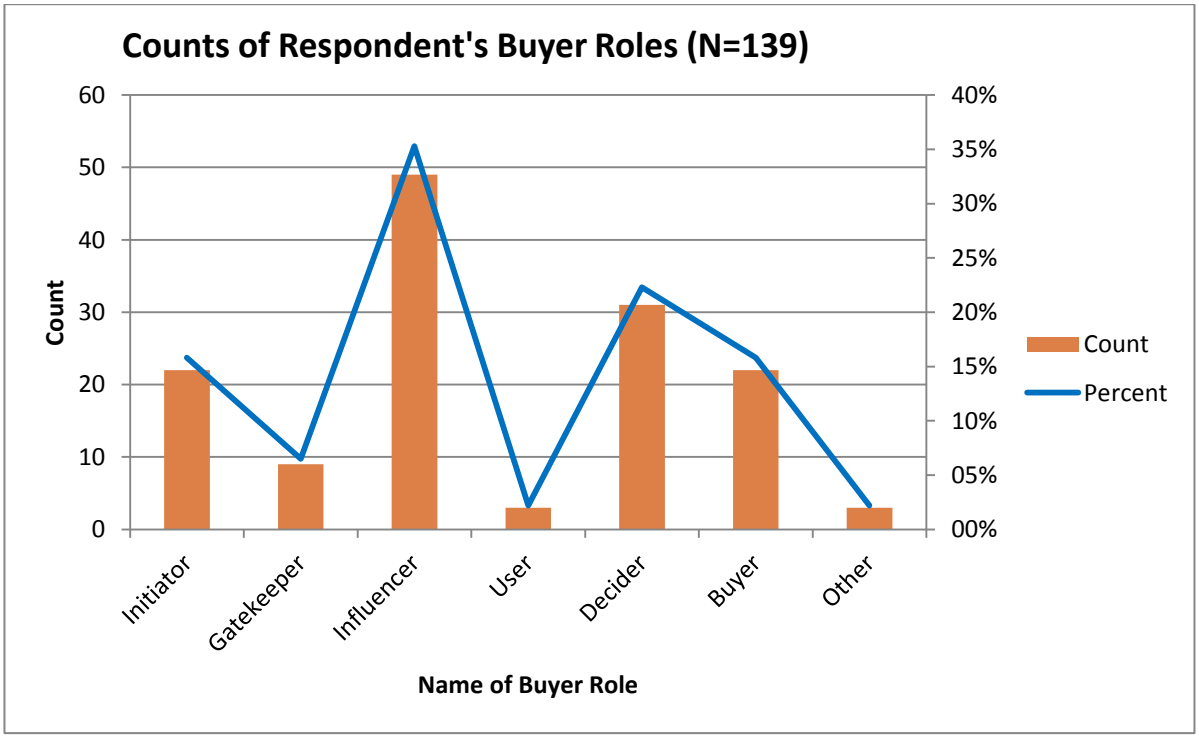

FIGURE 9 BREAKDOWN OF BUYER'S ROLES IN PURCHASE PROCESS

These 7 buyer roles are compared to the person's actual functional job title/responsibilities in Figure 10. We see that there are many different kinds of influencers, but deciders, buyers, and gatekeepers are mostly manager, engineers, or purchasers respectively.

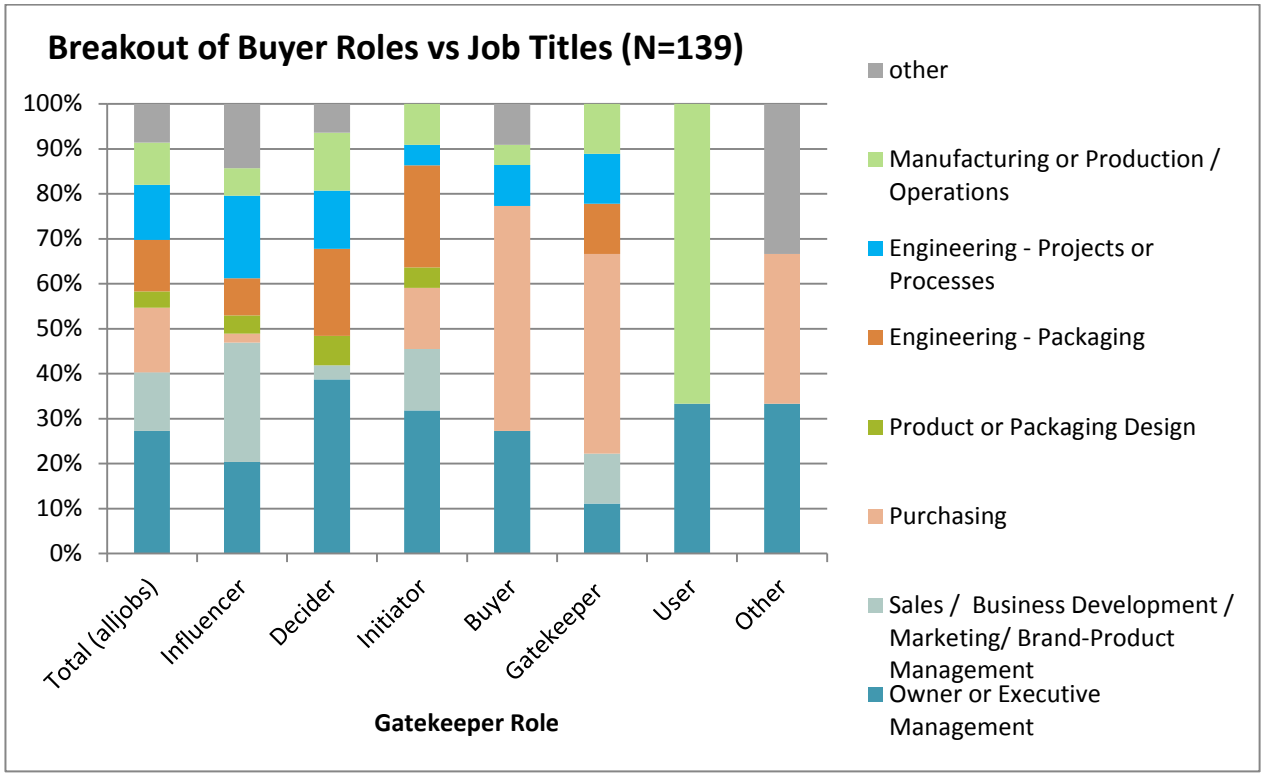

FIGURE 10 BUYER ROLES VERSUS JOB FUNCTIONS

5.0 FINDINGS: ARE THERE A *NEW BREED* OF ONLINE PACKAGING BUYERS?

5.1 Extending the reach of buyers

How far from work location do the buyers search?

We asked people how far from their location did they search for a solution or vendor for their packaging need. The Internet has enabled even small buyers to search for solutions or vendors easily, quickly, conveniently, and rather inexpensively worldwide. About one third of the respondents searched outside their own country as shown in Figure 11.

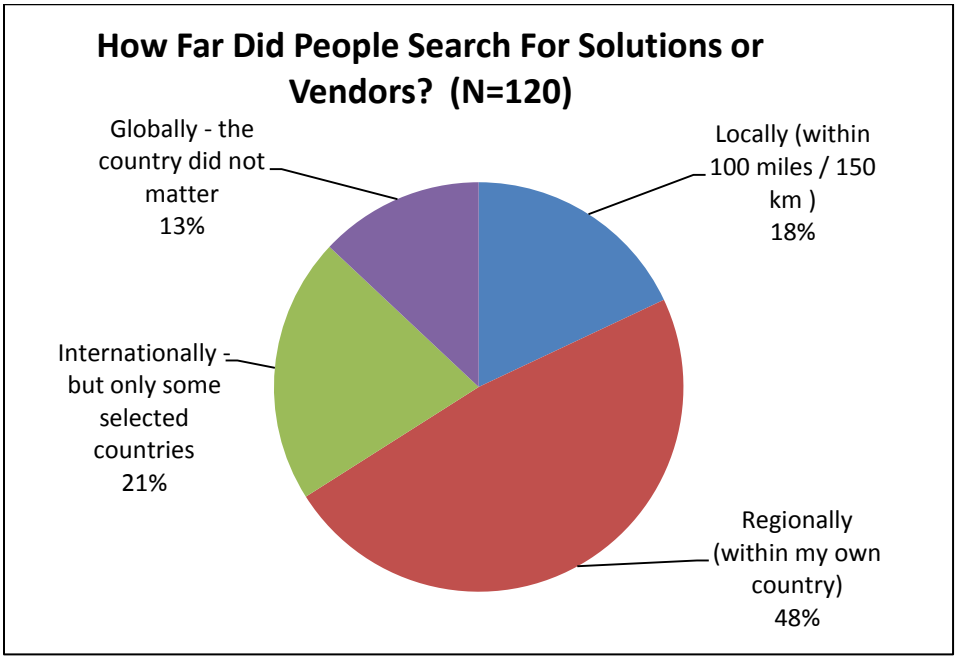

FIGURE 11 DISTANCE SEARCHED FOR SOLUTIONS

Value	Count	Percent
Locally (within 100 miles / 150 km)	21	17.5%
Regionally (within my own country)	58	48.3%
Internationally - but only some selected countries	25	20.8%
Globally - the country did not matter	16	13.3%

TABLE 3 DISTANCE SEARCHED VERSUS RESPONDENT COUNTS

We also looked at how the searched distance was related to the budget for the project and the type of packaging done by the organization (e.g. in house; outsourced; packaging services provider; or other). There was no special trend or correlation

found when comparing the type of packaging done and the distance searched. However as shown in Figure 12 , as can be expected there is a correlation between the budget for the project and the distanced searched ($p < 0.05$). As the budgets went up to $6M (USD) people tended to search farther from their location. The only exception was for projects for greater than$6M (USD). But for this data point we only had 8 responses, with 3 people searching international and 5 domestically.

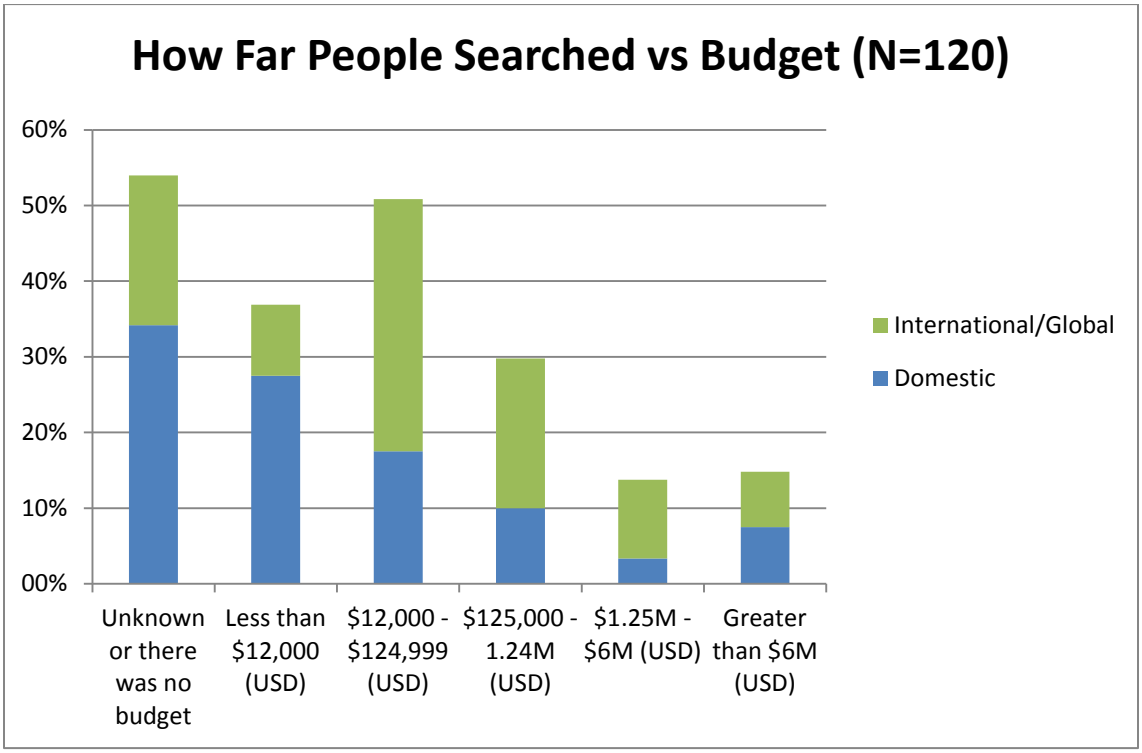

FIGURE 12 DISTANCE SEARCHED VS BUDGET

5.2 Internet usage versus buying stage

We identified 4 main phases or buying stages that people go through when purchasing a packaging solution or service.

- Identifying and defining the packaging need
- Identifying appropriate suppliers or vendors
- Validating suppliers and solutions (short listing)
- Final vendor / supplier selection

These stages are independent of whether or not the Internet is used to facilitate the purchase. Respondents were asked in which of the stages did they used online resources for help. Note respondents could pick more than 1 stage. The results show in Figure 13 that most people look online for identifying appropriate suppliers or

vendors (85.5%) followed by identifying and defining the packaging need (60.7%). An interesting comment from the "other" choice was: " seeing what others in market were doing".

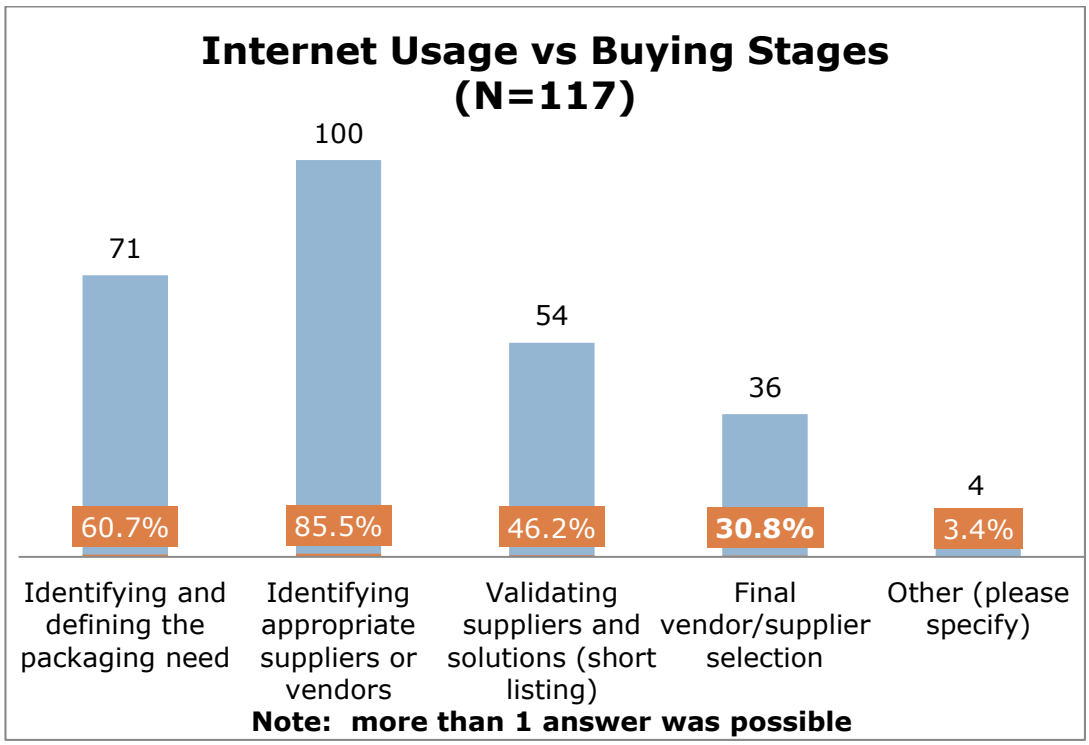

FIGURE 13 INTERNET USEAGE DURING BUYING PROCESS

A second question related to the one above, explored specific kinds of online and offline information sought during the 4 buying stages. There were 15 different information sources suggested. Respondents were asked to map each source into the **one** buying stage step where they felt it was the most useful. If they did not use the information source, then they could mark it as "not used".

Over 78% of the buyers did not use Facebook and more than 83% did not use Twitter to facilitate their buying process

The results for the 11 most used sources are shown in Figure 14. We did not show Google+, Twitter, Facebook, and Blogs, as all of these were used quite infrequently by the respondents. Blogs were not used by 61.9% of the buyers, Google+ was not used by 68.2% of the buyers; Facebook was not used by 78.8% of the buyers, and Twitter not used by 83.2% of the buyers.

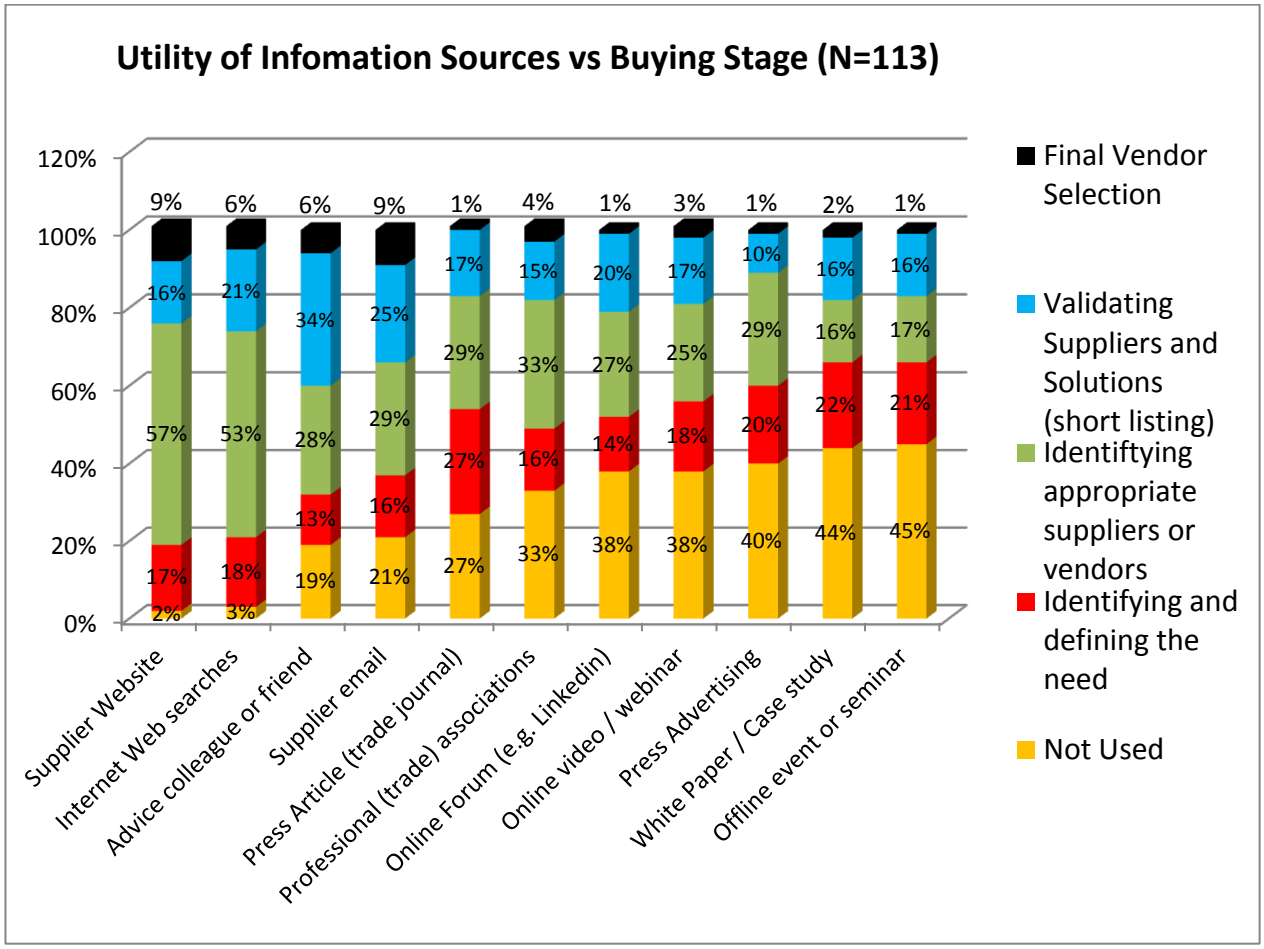

FIGURE 14 MAPPING OF INFORMATION SOURCE USAGE VS BUYING STAGES

5.3 Common types of information sought

After asking the types of online and offline channels and sources people use to search for information content supporting their purchase, we wanted to know what kinds of typical information people were looking for. We suggested 9 different kinds of information, and an "other" selection, and the option to mark "none of these". Respondents were allowed to mark more than one kind of information source. The results shown in Figure 15. Not surprising, product and pricing information were most commonly sought. Later below in Section 5.4 we will comment on the integrity and utility of these different kinds of information.

For the top 6 types of information content sought by buyers, we wanted to know which of the 6 buyer roles looked for these kinds of information. In Figure 16 these relationships are shown. We see that Initiators look for product information and case studies or customer testimonials more than the 3 other roles. This observation makes sense. What is noteworthy is that across the 4 buyer roles, the importance of customer

testimonials and case studies decreases (the top band), while best practices and peer reviews constitutes one third of the needs of the buyers.

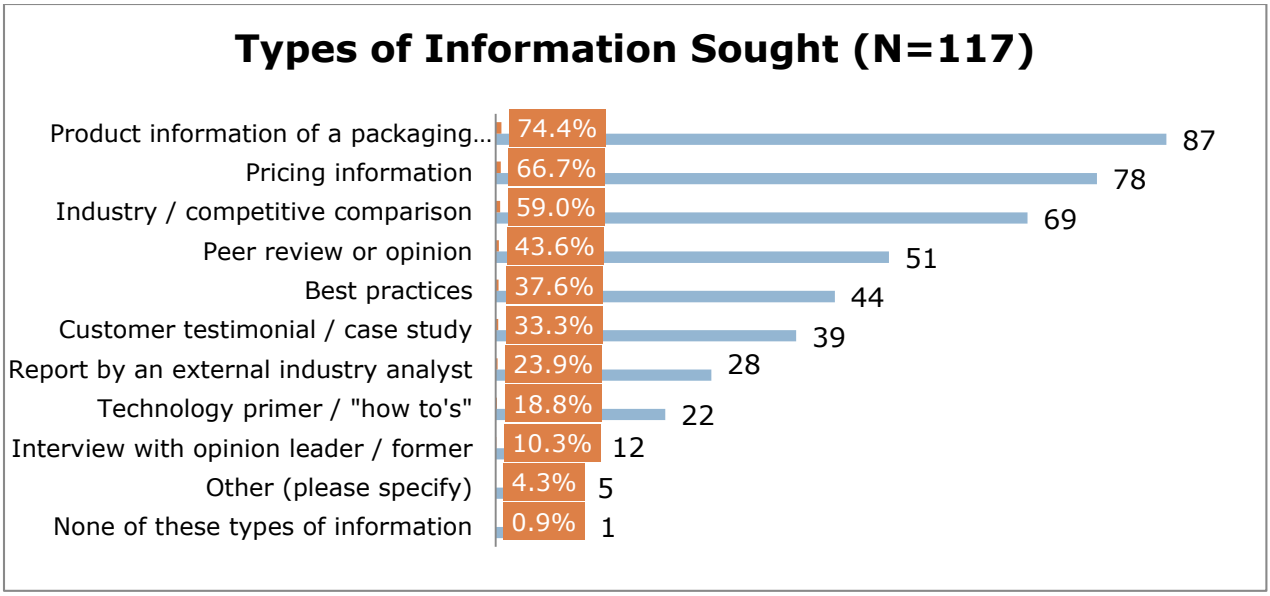

FIGURE 15 TYPE OF INFORMATION SOUGHT BY ONLINE BUYERS

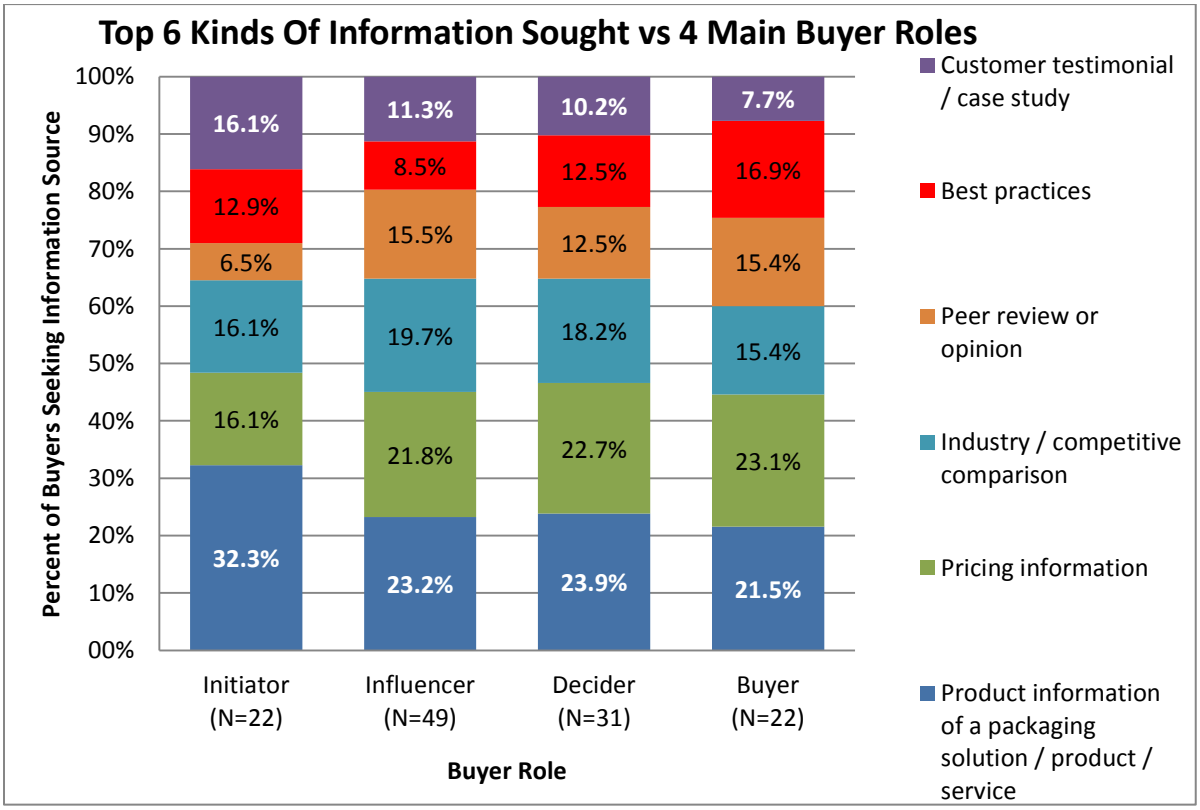

FIGURE 16 MAPPING OF INFORMATION CONTENT TYPES VERSUS 4 MAIN BUYER ROLES

5.4 Perceived impact, intent, effort, reputation, of information sources

Based on the work of Albee (2010), respondents were asked to rate the specific types of information content sources that they indicated that they used in Section 5.3. We report on 9 different kinds of information content used by respondents[3]. We explored four specific kinds of metrics to rate the utility, quality, trust, and ease of use of the various types of information collected by respondents during their purchasing process. These 4 metrics were: impact, effort, reputation, and intent. To further clarify these metrics, respondents were shown 3 – 4 phrases which helped clarify or define the metric. The phrases are reviewed in the next paragraph below. Ratings were done using a sliding scale between 0.0 – 10.0, with 1 decimal point accuracy. The extremes of the scale were labeled with descriptive terms related to the metric (see below). Upon presentation, each measurement started off at a default *neutral* position in the middle of the scale, having a value of 5.0.

The following definitions or clarifications were given for the 4 metrics:

Impact:

- simplifies a complex issue and resulting payoff,
- provides alternative strategic choices,
- shows future benefits leading to growth.

Impact scaling terminology: 0.0 = *No Impact at All*; 10.0 = *Lots of Impact*

Effort:

- easy to access promised information,
- no barrier or hurdles to get information,
- worthwhile.

Effort scaling terminology: 0.0=*Lots of Effort*; 10.0 = *Little Effort*

Reputation:

- instills confidence,
- comes from a peer referral,
- trustworthy and credible.

Reputation scaling terminology: 0.0 =*Poor Reputation*; 10.0= *Excellent Reputation*

Intent:

- focuses on providing insights and education,
- shares valuable information with little marketing "fluff",
- demonstrates that it will solve a business problem,
- does not request anything from you beyond your attention.

Intent scaling terminology: 0.0 =*Nontransparent*; 10.0= *Supportive*

[3] Unfortunately due to an error in the survey, we did not collect data about the impact of pricing information. But the other 3 rating factors for pricing are presented.

First the combined ratings of all 9 information sources are presented. The results are shown in Table 6 and the box plots shown in Figure 17. The impact of the online sources was rated a whole point higher than the effort to get information (7.1 versus 5.9). The reputation and intent were rated quite similar, but there was less agreement about the intent of the supplier's content. On the following pages, each of the individual information sources are mapped against the 4 metrics.

Descriptive Statistics	N	Mean	Std. Deviation	Variance
Impact Summary Across All Info Sources	351	7.11	1.83	3.37
Effort Summary Across All Info Sources	429	5.92	2.46	6.07
Reputation Summary Across All Info Sources	429	6.78	1.81	3.30
Intent Summary Across All Info Sources	422	6.67	1.96	3.87

TABLE 4 DESCRIPTIVE STATISTICS FOR ALBEE INDICATORS FOR ALL INFORMATION SOURCES COMBINED

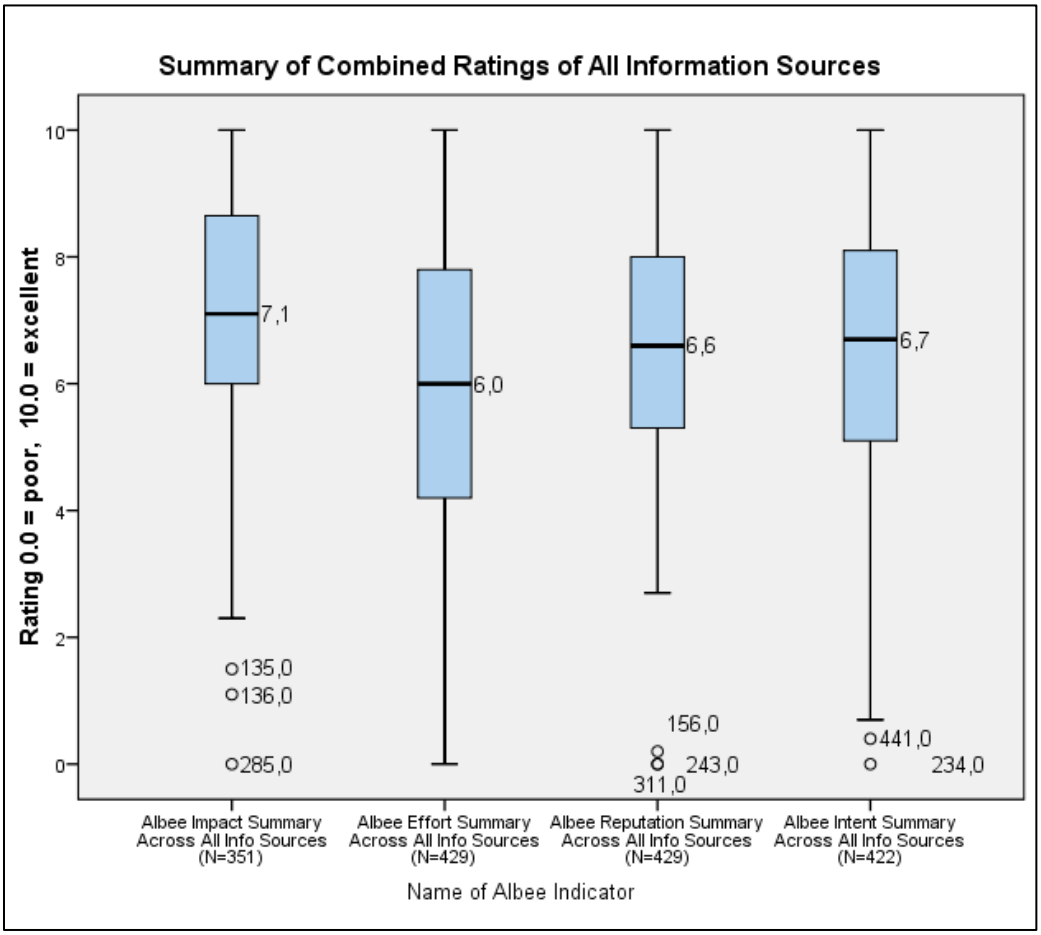

FIGURE 17 - SUMMARY OF COMBINED RATINGS OF ALL INFORMATION SOURCES

The impact ratings of 8 information content types are shown in Figures 18. As the number of responses varied between 12-87 across content types, we limit our commentary to information sources with more than 39 responses.

As one would hope, product information has the highest impact, median 8.0, with an inter-quarter range of about 7.0 – 9.0. While many vendors may pursue people to post neutral unbiased peer reviews of their products or services, the impact of such commentary is somewhat less valuable than simple product information. We see that the median for such commentary only 6.4, the inter-quartile range of 2.5 is similar to the information sources range of 2.0, but on the low side there are several people who rate such information less than 3.0. Most of the other sources have similar impact ratings, which may be explained by the buyer roles of respondents (we look at the influence of buyer roles later below).

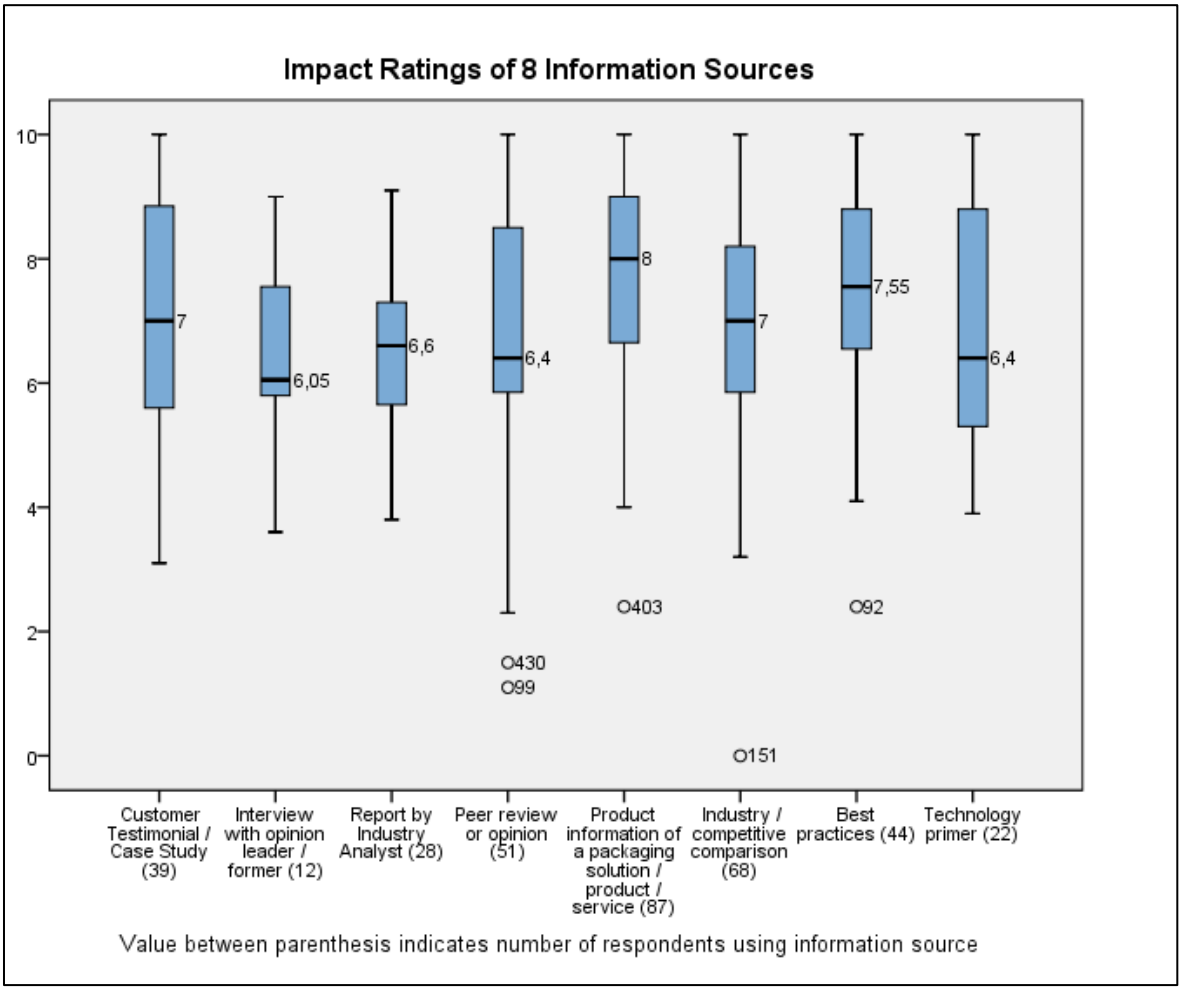

FIGURE 18 IMPACT RATINGS OF INFORMATION SOURCES

The ease of finding and getting information from suppliers to buyers is important when studying the health and functionality of an industry. Thus we asked buyers how much effort they needed to get their information content needs fulfilled. Vendors use a variety of well know and tested methods to spread information on the Internet, as well as perhaps gating access via registrations, emails, qualification(s), etc. We didn't ask **why** it was difficult to find information, perhaps this could be a topic for future study.

Many buyers reported it took too much effort to locate some information online. The median rating on a scale of 1.0 – 10.0 was less than 6.0 for information such as: industry analyst reports, industry competitive information, and technology primers.

Figure 19 shows that there is very large ranges of opinions for effort needed, ranging from 1.0 – 10.0 for most types of information content. Compared to the impact rating, all medians are lower. It appears that industry competitive comparisons are somewhat difficult to get find with a median rating of 5.4, and the bottom quartile stretching to just above 3.0. So there may be room for publishers, trade associations, and researchers to make such content easier to find and access on the Internet.

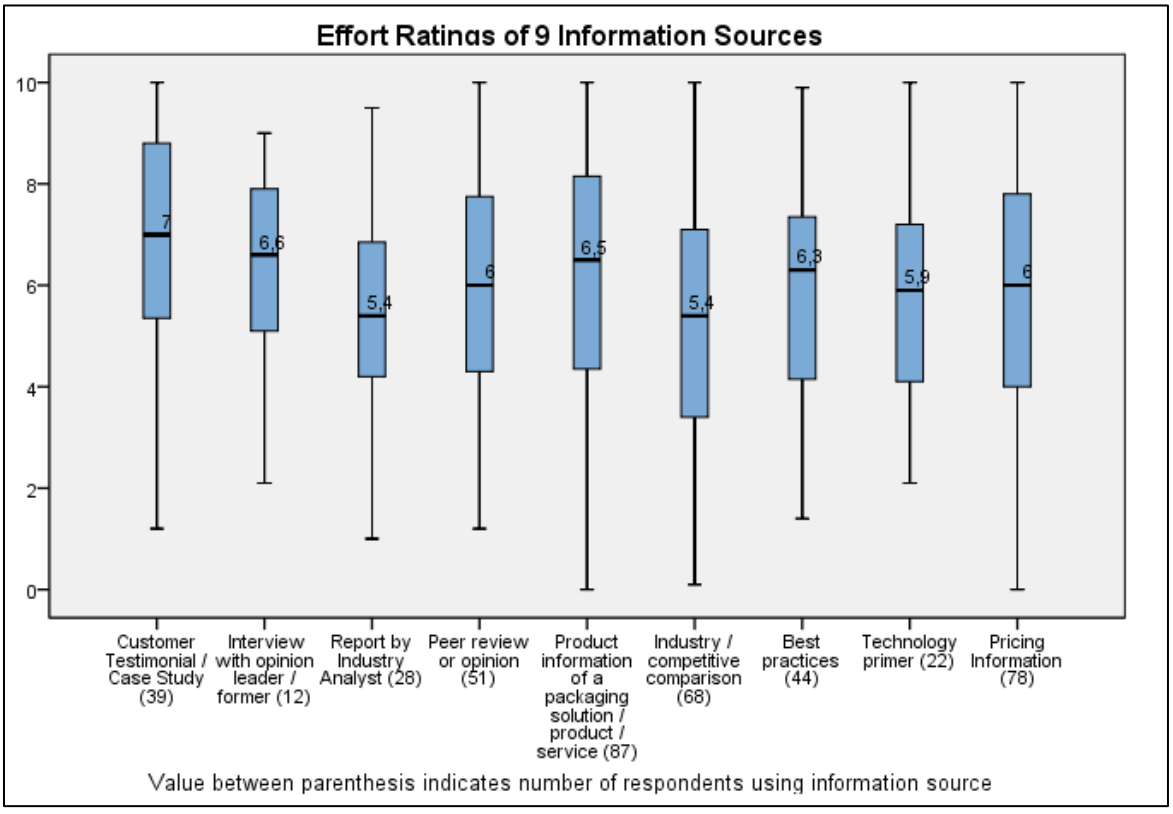

FIGURE 19 EFFORT RATINGS OF INFORMATION SOURCES

The perceived reputation of online content certainly plays a role in how successful vendors are in pursuing their online marketing and sales objectives. Smart and sophisticated online buyers today use a variety of means to check and verify the reputation of new vendors. In Figure 20 we see that all of the upper inter-quartile ratings are above 7.0, but almost all of the medians are below 7.0. One could argue that the vendor community has some work to do, as ideally they want to instill more confidence, be more trustworthy and credible to their buyers. The reputation of pricing information shows a median of 6.5. But when looking at the detailed data, 27 of the 78 respondents (34.6%) scored pricing reputation below 6.0, and 6 respondents lower than 5.0.

Over 1/3 of the buyers rated the reputation vendor pricing information less than 6.0 on a scale of 10.0 with reputation defined as: instills confidence, trustworthy and credible. One could argue that some members of the the vendor community has some work to do to improve upon this.

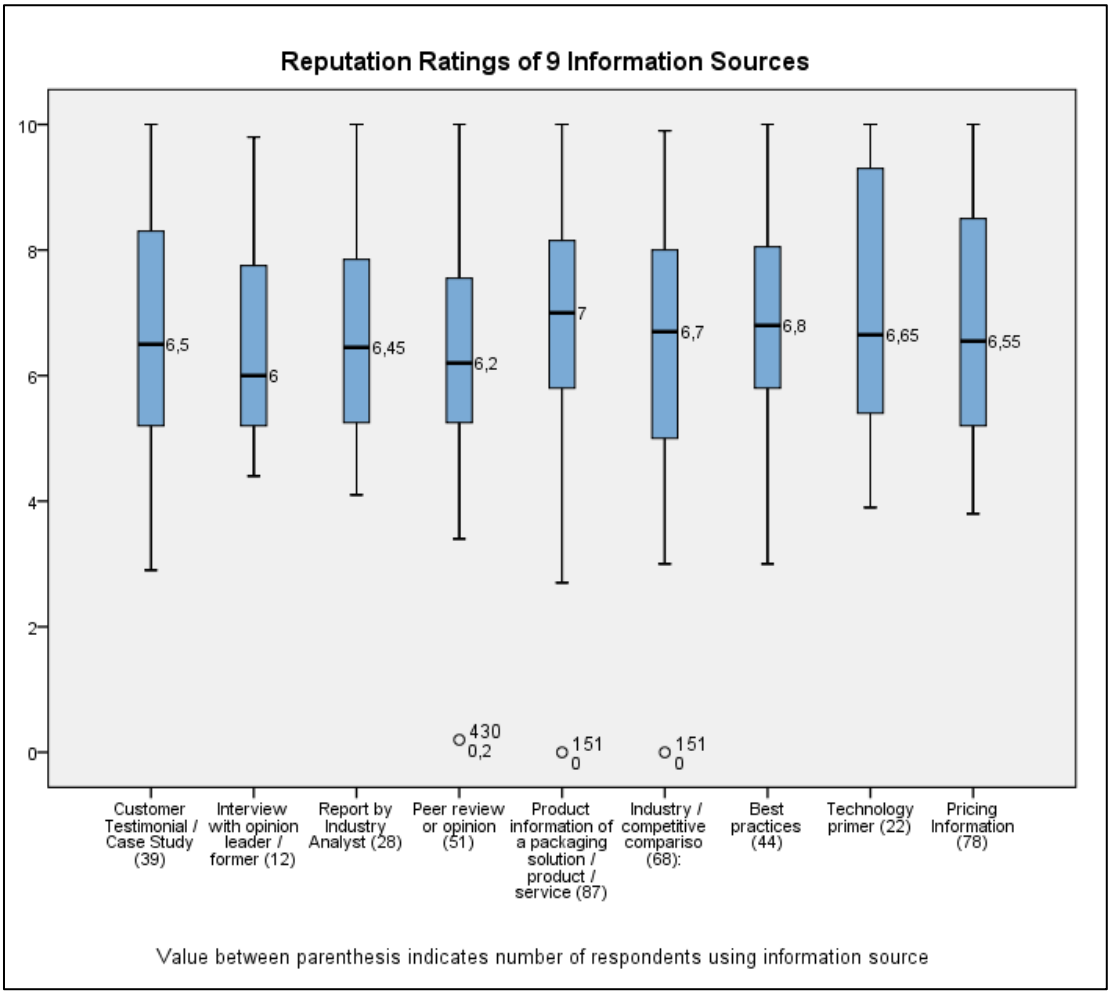

FIGURE 20 REPUTATION RATINGS OF INFORMATION SOURCES

One of the challenges facing packaging buyers is shifting through the massive amounts of content posted for them to consume by vendors. A relatively important measure of a vendor's impression comes from the intent of the information content posted for buyers. Naturally, sellers need to qualify customers and close purchases. This is where the intent of online information comes into play.

About 1/3 of the buyers find the intent of information posted online is not transparent and supportive enough. These buyers rated the intent of such information below 6.0 on a scale of 10.0

In Figure 21 the ratings are shown for the 9 information sources. While the median numbers seem reasonable, most above 6.5, we looked deeper. Fourteen of the 39 respondents (35.8%) rated the intent of Customer Testimonial Case Studies below 6.0. Nineteen of the 51 respondents (37.2%) of the peer reviews were rated with an intent lower than 6.0. Finally, industry comparisons and competitive reviews were also rated less than 6.0 by 28 of the 67 respondents (41.7%). So about one third of the buyers find that vendors are not being transparent and supportive of their buying process with *neutral* online informational content.

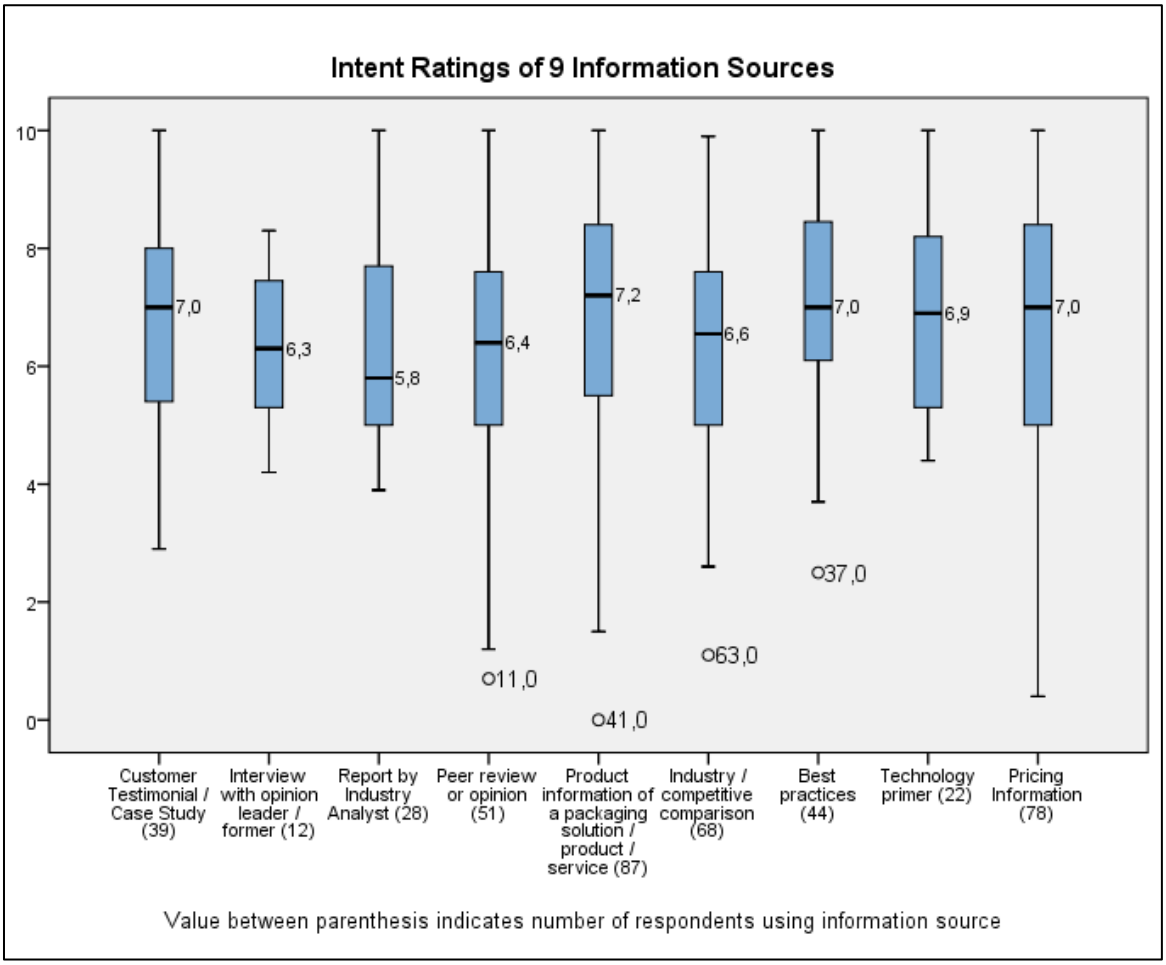

FIGURE 21 INTENT RATINGS OF INFORMATION SOURCES

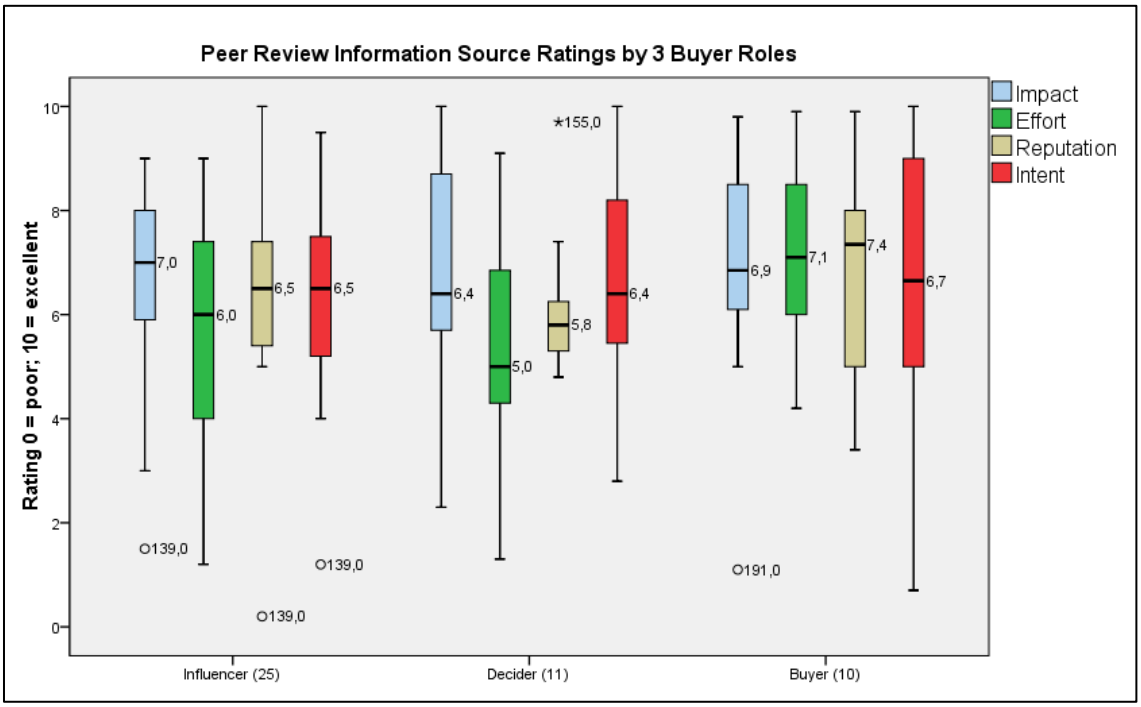

FIGURE 22 RATINGS OF PEER REVIEW INFORMATION SOURCES VS 3 KEY BUYER ROLES

In Figure 22 we observe that the effort needed to gather peer review for deciders is more than for buyers. The reputation of peer reviews are suspected by deciders, and much more trusted by buyers. Also, the inter-quartile range of the intent of peer reviews is lot small for Influencers than Buyers.

Buyers and Influencers find it takes quite a lot of effort to get product information online as shown in Figure 23. Although the intent medians are all the same, Deciders are more homogeneous, their inter-quartile range of ratings runs only from 4-9 while Buyers inter-quartile range runs from less than 2 to almost 10. We also looked at the demographics of the 3 buyer roles considering: years of experience; size of budget; and number of people involved in the purchase process.

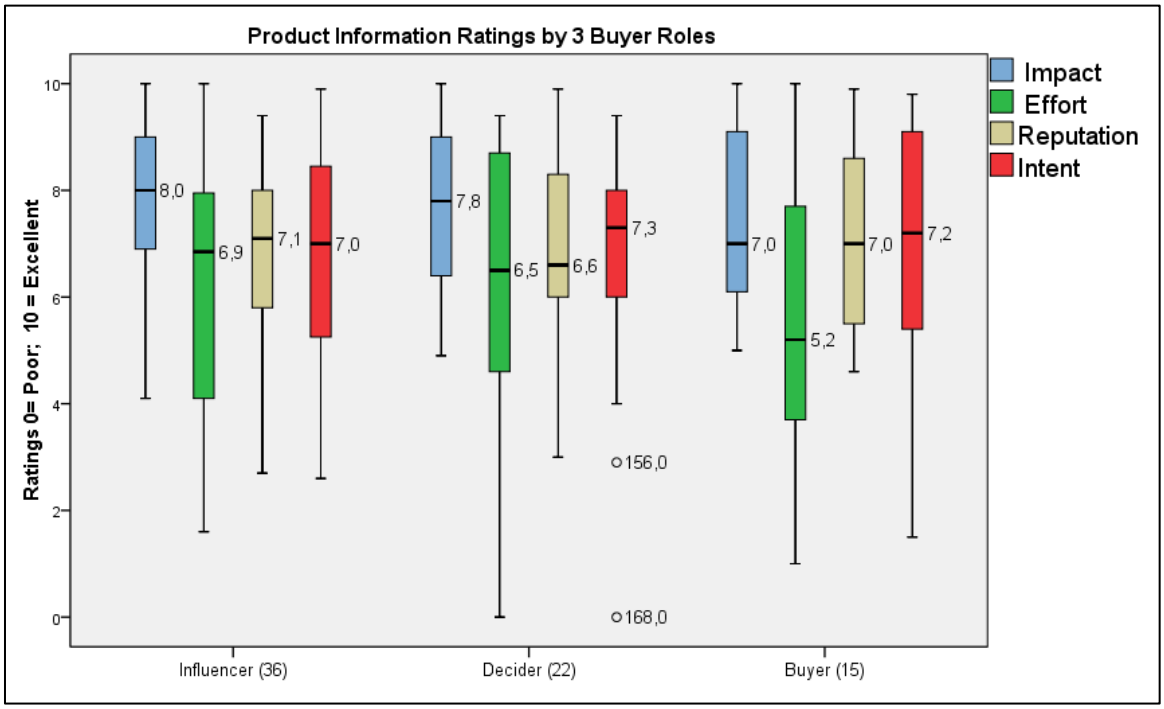

FIGURE 23 PRODUCT INFORMATION RATINGS VS. 3 KEY BUYER ROLES

There was no significant difference (>10%) in behavior when considering years of experience versus buyer role. Also, there was no difference when mapping the buyer roles versus the size of the buying team. Considering the budgets, there was some differences to be seen in the sizes of budgets availabe across the different buying roles. We found that 11 of the 14 Buyers (78%) were buying something for less than$12,000 or an unknown budget. In contrast only 13 of the 33 (39%) influencers and 7 of the 20 (35%) deciders were buying something less than $12,000 or an unknown budget. There doesn't seem to be any relationship between budget size and Influencer/Buyer roles when measuring the amount of effort needed to find information. Buyers have mostly smaller budgets but find it difficult, while Influencers have bigger budgets, but still find it difficult.

Figure 24 shows the ratings for Industry or Competitive Comparisons. In general the impact varies more for Buyers than Influencers. All 3 buyer roles find the effort needed is too much (medians less than 6.0).

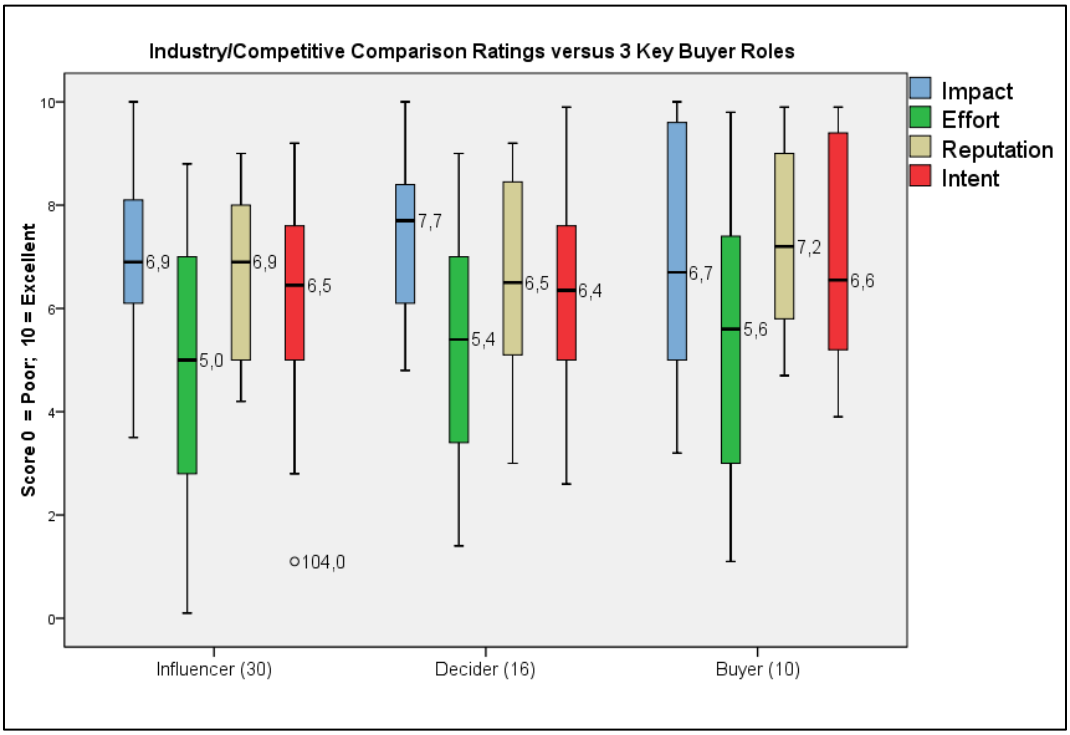

FIGURE 24 INDUSTRY/COMPETITIVE COMPARISON RATINGS VS 3 KEY BUYER ROLES

The pricing information ratings shown in Figure 25 that Influencers and Buyers are quite aligned in their median ratings (6.1, 6.2, 6.1, versus 6.2, 6.0, 6.1, respectively). But deciders show a greater range of effort needed to get pricing information, but they rate the intent at least 1 point higher than buyers.

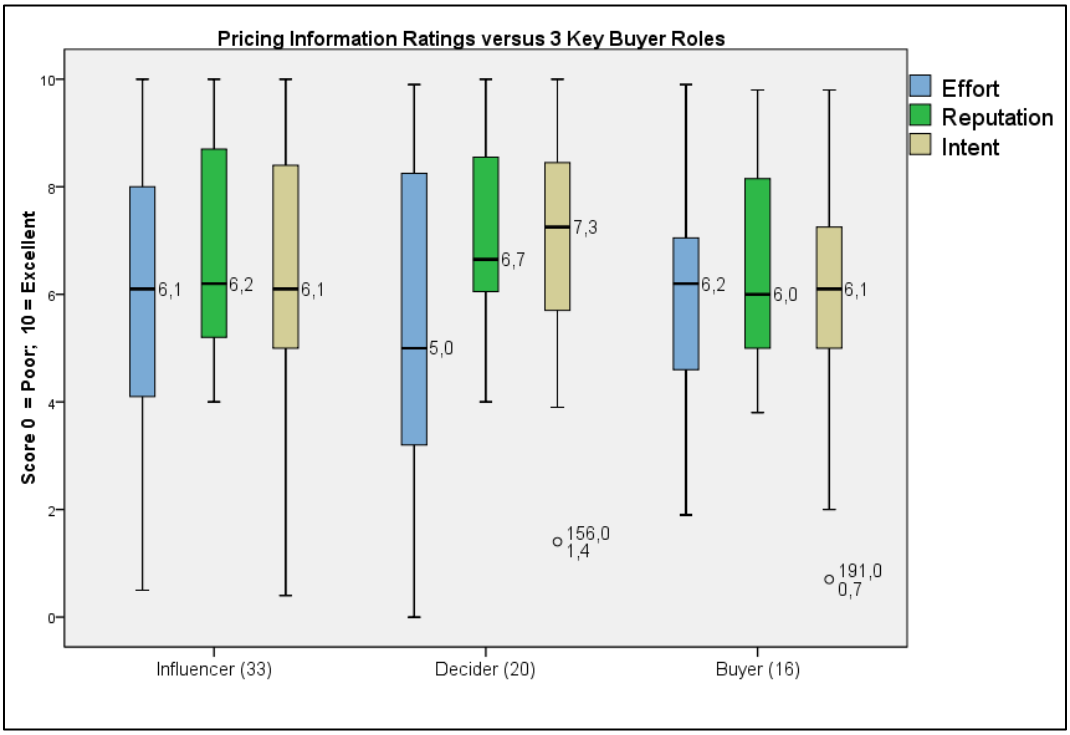

FIGURE 25 PRICING INFORMATION RATINGS VERSUS 3 KEY BUYER ROLES

5.5 How online information is shared

We asked people to tell us how they may have shared information that they collected online with colleagues. There were 6 possible methods ranging from verbally to not sharing it at all as shown in Figures 26 - 28. From the 5 possible sharing choices, we asked people to tell us their 1st most comment method, followed by 2nd, and 3rd most comment methods.

Interestingly, electronic sharing of information was always less than 50%, while verbally, or via print outs were still very significant. As first choice, only 37% of the people shared information via email or by sending links to the online content. These results probably stem from the sizes of the organizations where the respondents work as 66 of the 108 companies employed less than 100 employees on site. So that one may suggest that sharing information locally is related to the size of the company.

Worldwide, as companies get larger (>1000 employees), people tend to share the information more electronically, with 14 of the 28 respondents choosing email/link/intranet as their first choice.

At smaller companies employing less than 100 people, 50% of the buyers report that their first choice for sharing the information they collected online is verbally. The second most common method is email. Intranets, social media, or print-outs don't play a big role.

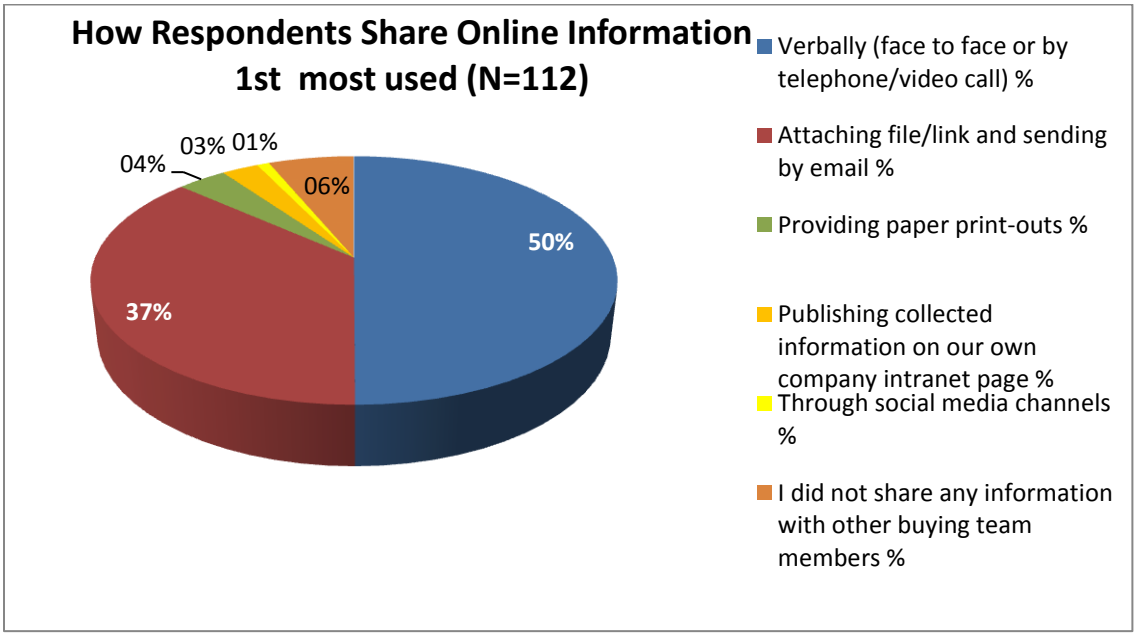

FIGURE 26 FIRST CHOICE METHOD FOR SHARING ONLINE INFORMATION

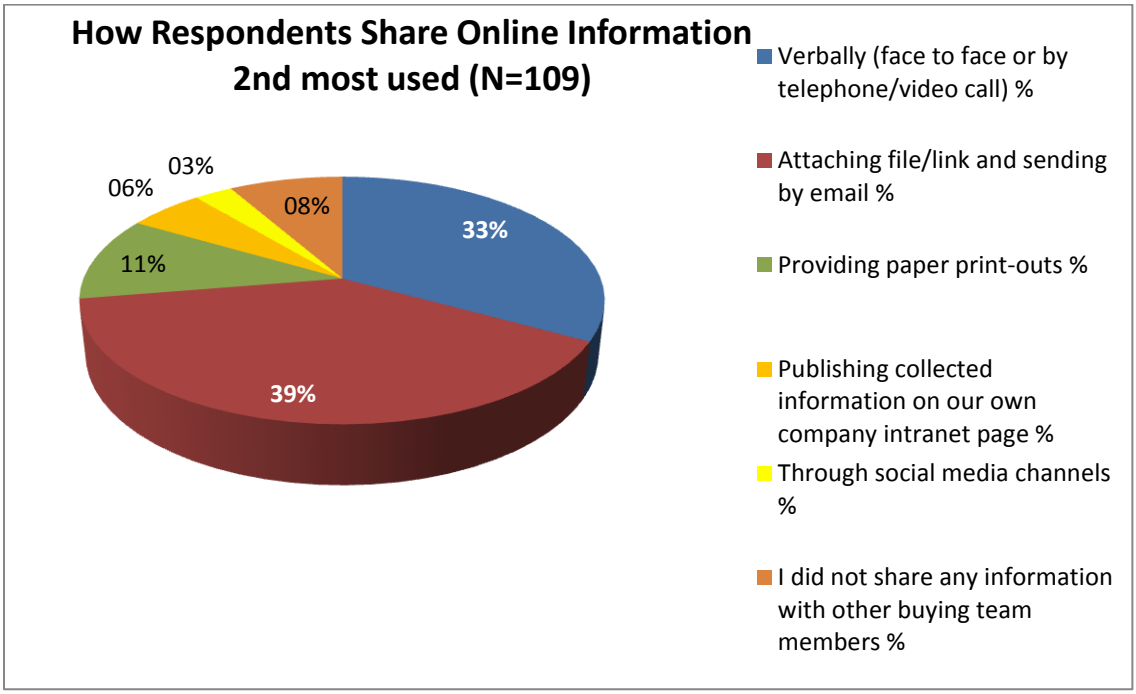

FIGURE 27 SECOND CHOICE METHOD FOR SHARING ONLINE INFORMATION

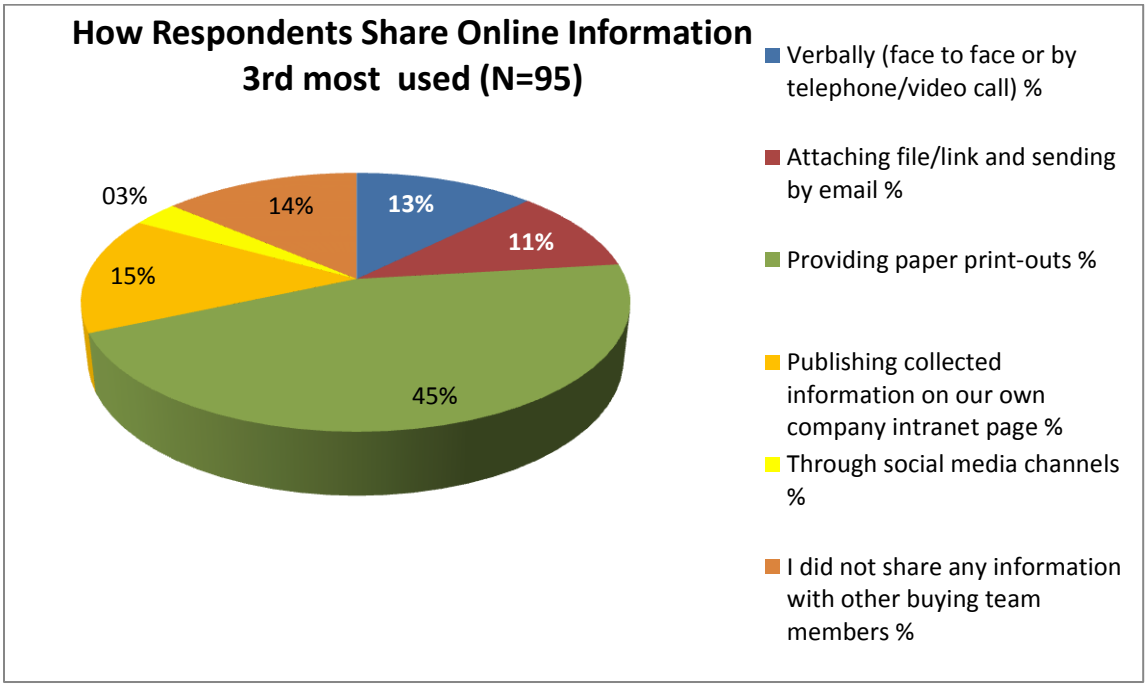

FIGURE 28 THIRD CHOICE METHOD FOR SHARING ONLINE INFORMATION

Who are the 3 people who used social media to share info:

1. Engineer; in North America; over 10 yrs. experience; package their own products in-house; multiple product types; over 1000 employees at location and worldwide; role – Decider; purchase length 1.5 months; searched within own country only; very positive about social media sources online.

2. Purchaser; in North America; over 10 yrs experience; packaging solution provider (contractors); serve food and beverage markets; 100 – 499 employees at 1 location; role – Initiator; purchase length 1.5 months; searched within own country only; time spent searching 3 months; positive about social media sources online.
3. Brand or Product Manager; in North America; 2 – 5 yrs experience; package their own products in-house; food & beverage products only; over 1000 employees at location and worldwide; buyer role – Initiator; purchase length 2 months; searched internationally (select countries); time spent searching 7-12 months; positive about social media sources online.

We also looked at the demographic characteristics of the 14 people who shared the online information using their company's own internal intranet. We considered 8 different factors: job title; buyer role; experience in packaging field; type of business they worked at; size of the company; length of time spent searching for information; distance searched from home; and general attitude towards social media. We observed only one difference in this group relative to the overall sample population, namely:

- Owners and Executive Managers were over represented, 8 of 14 (57.1%) versus about 35% in the overall population,

5.6 Perceived benefits of social buying

We asked people about the perceived and actual benefits that they gained when using online social media information sources. We asked people to rank the four propositions show here below using a 4 point Likert scale (*Strongly disagree; disagree; agree; strongly agree)* with and additional 5th option of *I don't know*.

The four propositions were:

1. Supplier research on social media networks helped me to widen or strengthen my knowledge/expertise about a specific packaging supplier/product.

2. Social media channels helped me to speed up the process of information transfer to other colleagues in the buying team and have advantages over other offline sources.

3. Me and my supplier-counterpart keep each other informed about events or changes that may affect the other party via social media platforms.

4. I have not derived any benefits from social media in making purchasing decisions for my organization.

The results are show in Figure 29. Fifty six (50%) of the respondents to question 1 either agree or strongly agree that social media networks helped them widen or strengthen the knowledge they had about specific suppliers or products, versus 38 (34.2%) who disagreed with this statement. When it comes to speeding up information decimation in the buying team, question 2, the results were opposite to question 1. Fifty three respondents (48.2%) disagreed that social channels helped versus 39 (35.5%) who thought social channels sped up information decimation.

50 % of buyers report that they did not derive any benefits from social media when making purchasing decisions for their company, 13% did not know, but 37% did derive benefits, such as speeding up the process

Regarding keeping up to date and informed about events, happenings, or changes at the buyer's and supplier's companies, question 3, respondents are split almost equally about the utility of social media networks. Forty six (42.2%) say social media is not useful in this aspect, and 50 (45.7%) say it is a useful medium.

Question 4 acts as a reflective *control* question which is all inclusive to specific benefits which could be derived from using social media in purchasing decision. The results are in line with the above results, 56 (50.4%) of the respondents agree that they did not derive any benefits in making purchasing decisions versus 41 (36.9%) who say they received benefits.

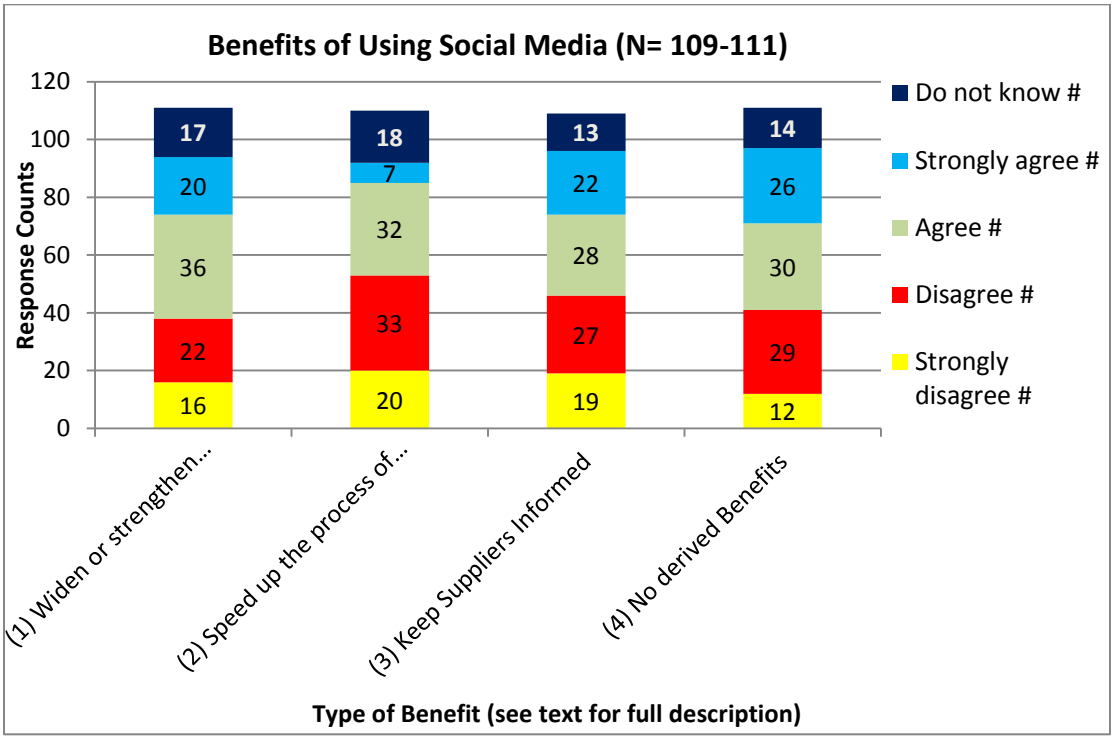

FIGURE 29 BENEFITS OF SOCIAL MEDIA USAGE

We looked deeper into the numbers presented in Figure 29. First we compared the benefits of social media usage versus years of work experience in the packaging industries (see Appendix 3). The work experience was grouped into 4 categories: less than 1 year; 2 – 5 years; 6 – 10 years; and more than 10 years. We received limited number of responses from the first and third categories. Thus we decided to group the first 3 categories into *less than 10 years* and *more than or equal to 10 years* then do the analysis. Further we combined the two agree answers into one sum; and we combined the two disagree answers into another sum.

The results of the work experience analysis did not show any significant (> 10%) difference in behavior to propositions 1, 2, 3, and 4 based on years of work experience.

Next we considered the length of the purchasing process – e.g. how long people searched for information before the actual purchase. The results are shown in Appendix 4.

The only significant difference (> 10%) detected was for proposition 4, where people who searched 3 – 12 months found social media a lot less useful than the population in total. In this group 13 of the 37 people (35%) strongly agreed that they didn't benefit from social media during their search. In contrast only 13 people out of 98 (13.2%) of the base line group felt this way (after subtracting off these 13 people from the baseline group of 111). So it appears that in longer purchase cycles, perhaps social media usage is not as well engrained or appreciated.

We collected data about the number of people involved in the decision making process. From the 5 groupings, we only had enough responses for 2 groupings: *1 other person* (besides the respondent), 20 responses; and *2 – 5 other people*, 68 responses. We compared these factors relative to the 4 propositions above, again looking for significant differences of 10% or more in answers (See Appendix 5). The only significant difference came from people who agreed and strongly agreed with proposition 1. Here we found that 13 out of the 20 respondents (65%) deciding with 1 other person felt social media helped them. In comparison only 32 of the 68 (47%) people working with 2 – 5 other decision makers felt this way.

Finally we compared the answers we got in Section 5.2, where we asked which information sources/channels people used, compared to the perceived benefits of social media usage for the purchase. The results are shown in Figure 30. The purpose of the chart is to explore the relationship between the people who received no benefits from social media and the reported usage of various information channels by these same respondents. In Figure 30 we found 56 people reporting no benefits – these are show as the red bar in the figure. We see that of these 56 people reporting no benefits, 25 didn't use Linkedin, 46 didn't use Facebook or Twitter, and 35 didn't use Google+ as information sources for their purchase. Thus lack of usage of these 4 social media channels may explain why a significant number of people report that they didn't get

any benefits of social media during their purchasing cycle (although they could have used other social channels not included in the survey).

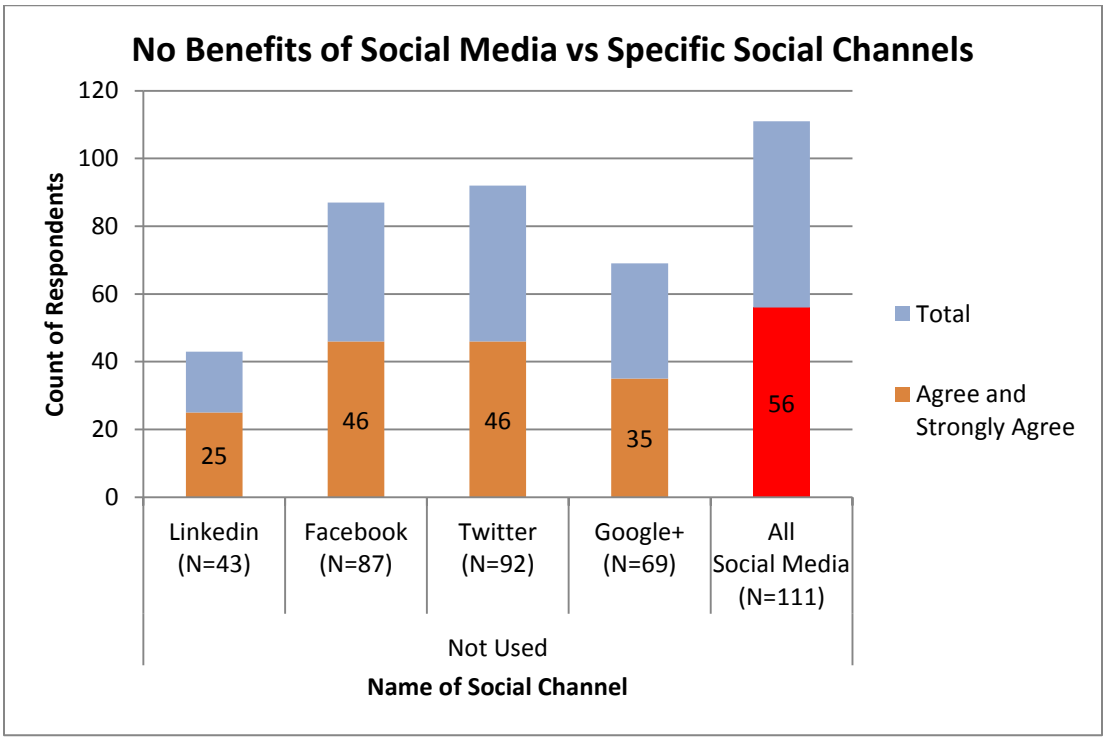

FIGURE 30 COMPARISON OF SOCIAL MEDIA BENEFITS VS SPECIFIC CHANNEL USE

5.7 Importance of social media for work

We asked respondents to rate the importance of 4 different triggers for using or participating in online social media discussions/channels for work purposes only. The triggers were defined as:

1. Expanding personal and professional network
2. Gaining new business contacts
3. Accelerating the establishment of contacts
4. Not using social media would give me personal and professional disadvantages

Respondents were asked to use a Likert rating system which consisted of 1 of these 5 choices: not important; somewhat important; important; very important; extremely important. The results of the 111 respondents ratings are shown in Figure 31. Over 60% of the respondents agreed that the first 3 statements are extremely, very, or simply important to them. Regarding the last statement (#4) the percentage fell to 54%. Thus about 46% of the respondents are not very worried about losing out if they don't use online social media.

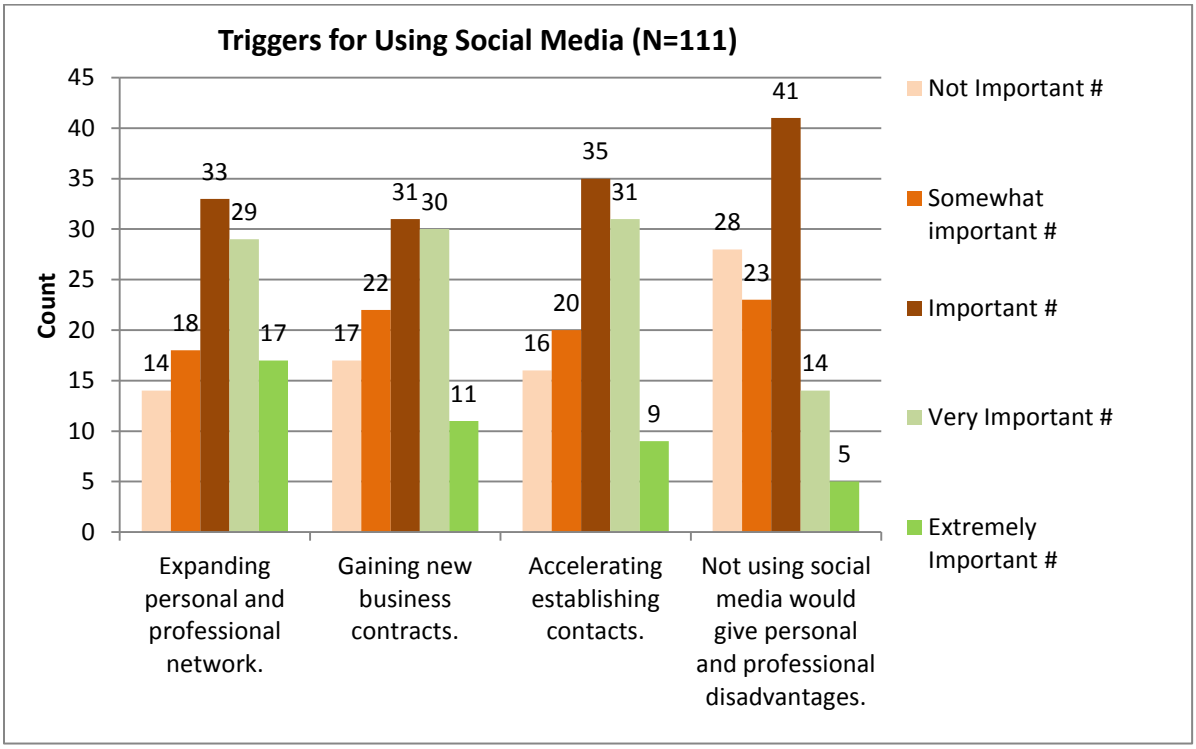

FIGURE 31 RATING 4 TRIGGERS FOR USING SOCIAL MEDIA FOR WORK

5.8 Smoothness of purchase process versus online and offline factors

We investigated how the smoothness of the purchasing process by asking how people perceived or experienced working together with colleagues and/or external advisors or suppliers. The overall rating of the smoothness of the process is shown in Figure 32. Ratings ranged from 0.0 which represented *very difficult or not smooth at all* to 10.0 which represented *very smooth.* A little over 25% of the respondents rated the experience less than 6.0.

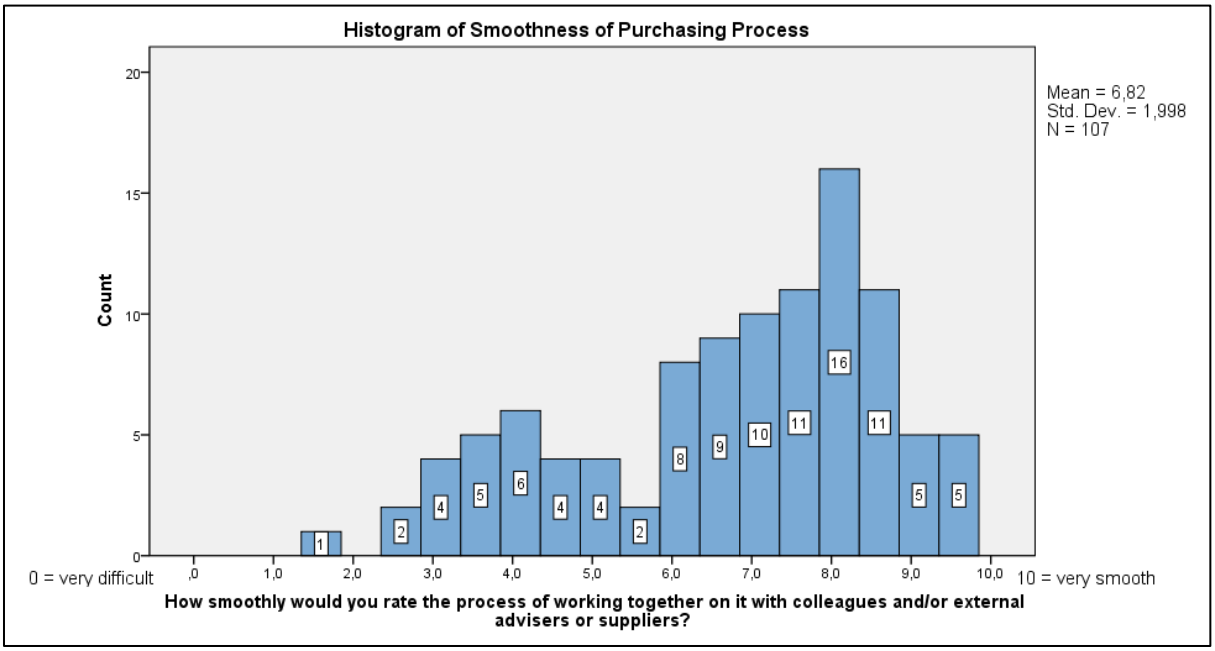

FIGURE 32 RATING THE SMOOTHNESS OF THE PURCHASE PROCESS

By applying cluster analysis we explored if the 107 respondents had some common characteristics with respect to the smoothness of the purchase across these variables:

- Buyer roles (6 roles)
- Use of Social Media for business (5 usage ratings)
- Size of the budget for the purchase (3 monetary classes)
- Distance searched from current location (4 distances)

For an example of how the clusters looked like versus the smoothness ratings, please see Appendix 6, Smoothness of Process vs Budgets .

The smoothness ratings of buying processes using the Internet as an aid was not influenced by most buyer roles, social media usage, or size of budget. However dissatisfied buyers (ratings less than 6.0 on a scale of 10.0) tended to be disproportionately Influencers who used the Internet for defining needs, final vendor selection, and watched more videos.

For these 4 variables we only found differences when clustering the smoothness ratings for distance searched. The results of the 4 distance clusters are shown as a box plot in Figure 33. It appears that as people searched for a solution farther from home, the smoothness of the entire purchase process decreased significantly. We see that the median decreased from above 8.35 to about 6.15. Additionally, the spread of the data (25% and 75% percentiles) increases as buyers engage suppliers farther from home. This result is not surprising

However one cannot conclude that distance is the sole factor effecting the smoothness of the entire buying process. Thus we checked the smoothness versus the frequency of the purchase shown in Table 7 . One explanation of the boxes in Figure 33 could be that the percentage of people buying the product/service for the first time, or infrequently (less than 1 time per year) increases from 15% for local buys to 37.7% for global buys.

Distance Searched vs How Smooth the Process Went (N=107)	count (N)	median	1st time or < 1/yr.	Yearly or repeat buy
Locally (within 100 miles / 150 km)	20	8.35	15.0%	85.0%
Regionally (within my own country)	49	7.00	20.4%	79.6%
Internationally - but only some selected countries	24	7.00	20.8%	79.2%
Globally - the country did not matter	14	6.15	37.7%	62.3%

TABLE 5 SMOOTHNESS OF BUYING PROCESS VS FREQUENCY OF BUY

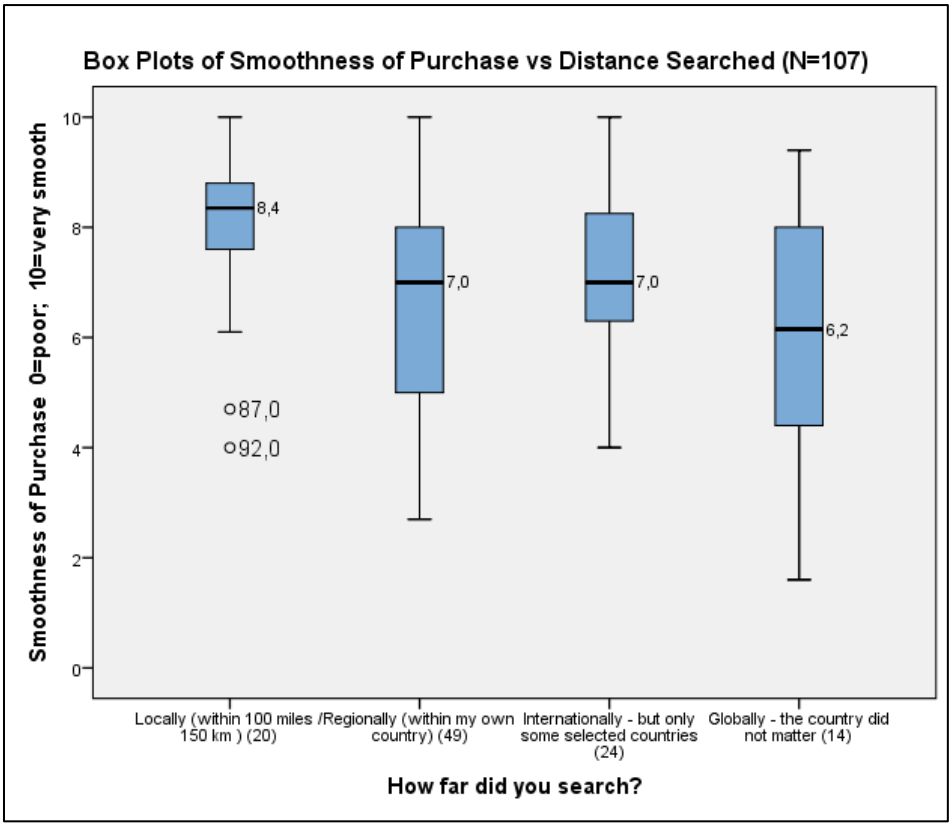

FIGURE 33 SMOOTHNESS OF PURCHASE PROCESS VS DISTANCE SEARCHED

Since we didn't see any special smoothness relationships between the overall population and 3 of the 4 specific demographic variables above, it made sense to consider a smaller subset of people, namely those who had less than optimal purchasing experience. Thus we focused on the 28 people who rated the purchase experience poorly, namely below 6.0. Were there specific anomalies or something special in this group compared to the overall population. We looked at these variables:

- Job function
- Years of packaging experience
- Nature of the company's packaging activity
- Number of employees at the respondent's location
- Buyer role
- Which stages of the buying process did they use the Internet
- Types of information that they sought online
- Type of online mediums used to find the information

From these variables, we found 7 differences which are related to the last 4 bullet points as shown in Table 8.

	Not Smooth Process <6.0	Smooth Process >=6.0
Buying Stage	N=28	N= 75
Identifying Need	(21) 75.0%	(44) 55.0%
Final Vendor Selection	(12) 42.9%	(23) 29.1%
Buyer Roles		
Influencer	(13) 46.4%	(29) 36.7%
Decider	(5) 17.9%	(21) 26.6%
Online Content Sought		
Best Practices	(8) 28.6%	(33) 41.8%
Online Mediums Used		
Video Presentation	(20) 71.4%	(43) 38.1%
Google+	(13) 46.4%	(27) 36.5%

TABLE 6 DEMOGRAPHIC VARIABLES RELATED TO LESS SMOOTH BUYING PROCESSES

6.0 DISCUSSION

In Section 1.0 of this report six objectives were set forth. Five of these objectives are now reviewed, as the sixth one stated the need to survey real qualified packaging buyers which was obviously met.

The **first objective** was: *Results should enable buying teams to gain insights into the online behavior of colleagues during complex, sometimes lengthy buying cycles. Who is using online information sources; during what phases of the buying cycle are these people using online sources; which kinds of online resources are commonly used?*

Certainly the results do shed some light on how packaging buyers behave when searching for solutions online. We can't say that a majority of the respondents were involved in complex lengthy buying cycles. A majority of the buyers looked for 3 months of less before the purchase, were repurchasing something they had bought before for less than $125K (USD). Never the less, there were a few dozen buyers who searched longer, worked with more than 5 people on the purchase, and had budgets over $125K (USD).

The demographics enabled us to specify well who is using online information sources, both as job function title, and the buyer role that each respondent carried out during the purchase. Figure 13 and Figure 15 in Section 5.2 and 5.3 successfully answered in which of the 4 buying phases (steps) the Internet was used, and what kind of information was sought online. Not surprisingly, identifying appropriate vendors and suppliers is the most common activity online.

The **second objective** was: *Determine if there are significant differences of online behavior and social media usage by 6 different types of buying team members.*

We had limited success in meeting this objective within this study as only 111 people finished the entire survey while telling us their buyer role. Thus for some of the 6 buyer roles we did not have enough respondents to present interesting or reliable results (e.g. Gatekeepers, Users, and Initiators). Section 5.3 mapped 6 kinds of information sought by buyers versus 4 different buying roles. However we note that the sample sizes were quite small (between 22 – 49) and thus of limited utility. The information sought matched what would be expected for each buyer role, but no more can be said. Similarly comparing the use of social media ratings against buyer roles was also limited by small sample sizes and thus was not reported.

The **third objective** was: *Results should enable buying teams to benchmark their own online behaviors against similar industry practices and other competitive buying teams.*

This objective was met with some degree of success. Section 4 and Appendix 1 characterized the buyer demographics of respondents. Using that data in the other sections of the report, readers can measure their performance on items such as:

- Whether it makes sense to search internationally or globally based on the purchase budge.

- How smooth their purchase processes run compared to various demographic variables and purchase variables
- Which kinds of information are used by buyers during different buying stages (steps)
- Their own perceived ratings of the intent, reputation, impact, of online information, and the effort needed to find online information, compared to other packaging buying teams.

Certainly more results could be presented, as the analysis of the collected data was limited to about 50 possible paired relationships. Based on the 22 questions, there are 231 possible paired combinations, but naturally some are nonsensical.

The **fourth objective** was: *Identify one to two additional key needs or insights about online purchasing behavior of capital goods/services in the packaging industries that act as seeds for follow-up studies.*

As in many such exploratory studies, the results create new questions to answer. Sometimes the most fruitful follow-up studies emanate from readers who send feedback. Thus far the author has identified these ideas for near future study:

1. Gap analysis. Using the various Albee ratings, social media benefit ratings and information sought online by buyers, it would be possible to now survey the supplier vendor community to see how they rate or perceive the utility of these channels, and their own performance. Then the two sets of measurements can be compared to see if there are any interesting or significant gaps.
2. During the qualification process, a large number of people who purchased something for their company indicated that they did not use the Internet to facilitate the process. It would be interesting to follow-up with these group exploring why not.
3. Do smaller buying teams (1 – 3 members) profit more from social media than a larger team (> 6 members) when purchasing an item or service the first time?

The **fifth objective** was: *Enable vendors to better optimize their online content production and distribution tactics thereby saving themselves money and resources and improving the buying process for their valuable customers.*

While the sample was limited in this study, certain patterns and data is of value and use to the supplier vendor community. For example, during the latter stages of buying process, very few buyers use social media. Second, less than 50% find social media beneficial to their purchasing effort. At the same time, it seems to take too much effort to find information online, with the reputation and intent of certain online information sources rated poorly. This is not to imply that all suppliers need improvement, and that all content is dubious. However, the reporting that it takes too much effort to find certain types of information is in-line with one of the major premises which motivated the need for this study.

The exploratory study provides some key insights on how the supplier vendor community can better serve packaging buyers. Our goal is to continue studying packaging buyer's online behavior in the coming years. We want to extend the study yearly, making it a longitudinal exercise. Based on some feedback we received already, future surveys should be shorter. Thus in the future we will strive to remove 4 – 5 questions which had little utility in this research. The shorter survey then should be able to be completed in less than 20 minutes.

Another limitation of the study was adequate participation from buyers outside of the USA. A little less than 20% of the sample population came from outside of the USA or Canada. Clearly, there are vast number of packaging buyers worldwide. Thus next year's work will focus partially on getting increased participation from buyers in countries outside of North America.

7.0 MANAGERIAL IMPLICATIONS

Buyers

Buyers report a variety of challenges when using the Internet to facilitate their packaging purchases. Some of the key variables in this study are the size of the buying team, the role of the purchaser in that team, and whether the purchase is a *rebuy* commonly sought yearly, or perhaps something new and expensive.

As buyers search for packaging solutions farther away from their company, the smoothness of the entire process decreases. Thus while the Internet enables global searches and interactions, it does not always lead to better results than buying locally, or regionally if possible. Thus management needs to accept such risks when authorizing buyers to look afar.

When buyers report that the purchase process did not go smoothly (< 6.0 on a scale of 10.0 = excellent), a disproportionate number of these buyers used online resources during the *defining the need* and *qualifying the vendor* steps of the buying process. It appears that these 2 steps are where the supply side of the industry needs improvement. While there are many reports by industry analysts, industry competitive comparisons, and technology primers posted online, many times it takes too much effort to find and access these information sources. We are currently studying the ease of obtaining such information in another parallel study. At the same time, people report that the impact of such resources mostly quite high (>= 7.0). So it makes sense for buyers to continue searching for such information, but to share their displeasure about difficulties in finding and accessing such content online.

The utility of using social media for facilitating purchases is questionable. Clearly buyers do network online with peers using resources such as Linkedin or Google+. But less than half report that such social media channels aided a purchase the past year. Naturally the use of social media to facilitate a purchase is highly dependent upon the individual buyer's motivations, skill in using social media, and even perhaps years of experience in the industry (as it takes time to build up contacts). Thus it make sense for buyers to continue using social media, especially for more expensive, first time, international, and lengthy purchase cycles. The real profit *seems* to be when the buying team is small (1-2 people), but further study on this topic is suggested.

Suppliers

This study substantiates that buyers do indeed self-educate themselves to a great extent before they contact suppliers. While rich larger companies can afford the luxury of supporting many different kinds of online channels and content, smaller and mid-sized company can not. Thus most companies must make hard choices. The results herein indicate that about half of the buyers don't gain any benefits from social media channels, groups, or postings for their work. So while a few suppliers have vibrant social media channels that they control, the value of such investments remains questionable.

One key problem with social media messaging is gaining the required audience reach for free or at reasonable cost. Facebook has reduced its feed of free organic posts to 2000 people who are friends or like a corporate page. Thus for larger audiences you have to pay. Finally, at least within small to mid-sized companies, people rarely share content using social media methods with colleagues. So many of the "share" options on emails, webpages, blog-posts, etc. go unused (which we assume suppliers are tracking and finding the same).

Smart suppliers will reassess their policies and tactics and the searchability of their online content intended to enhance buyer's journeys online. As reported, at least 1/3 of the buyers find it difficult to find your information. When found, many question the intent of your posted resources. However, not all types of digital content are rated the same by the different buying roles we investigated. Thus it would make sense to focus first on improving specific content meant for different buyer roles, improving upon some of the deficiencies with regards to reputation and effort. Such exercises are not an easy undertaking when working across continents with cross cultural customers. What is deemed acceptable content and messaging in one buyer culture may be perceived entirely differently far away. Thus for small or mid-sized suppliers with limited foreign offices this remains a challenge.

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APPENDICES

Appendix 1: demographics of participants

3. What is your primary job function (please select one only)?

Owner or Executive Management	28.9%		43
Brand or Product Management	3.4%		5
Sales / Business Development / Marketing	8.7%		13
Purchasing	14.1%		21
Research and Development	4.0%		6
Packaging Design	1.3%		2
Engineering - Packaging	11.4%		17
Engineering - Product Design	2.0%		3
Engineering - Projects or Processes	11.4%		17
Manufacturing or Production / Operations	10.1%		15
other	4.7%		7
		Total	149

4. How long have you been working in jobs related to packaging?

Under 1 year	5.4%		8
2-5 years	18.9%		28
6-10 years	10.1%		15
Over 10 years	65.5%		97
		Total	148

6. What is the main type of packaging activity which takes place within your company?

We package our own branded products ourselves, in house	40.0%	58
We manufacture our own branded products, or use original design manufacturers (ODMs), but outsource the packaging to 3rd party service providers	15.9%	23
We are a packaging solution/service provider working for third parties (on contract basis)	18.6%	27
Other (design, engineering, marketing, services), we do not package anything ourselves	25.5%	37
	Total	145

7. What market(s) does your company serve?

Food & Beverage	49.0%	71
Pharmaceutical/Medical	37.2%	54
Personal Care Products	33.1%	48
Household Products	31.0%	45
Industrial Products	39.3%	57
Other	15.2%	22
	Total	145

8. Approximately how many employees does your organisation employ?

	Fewer than 50	50-99	100-499	500-999	More than 1000	Don't know	Responses
At the location where you work	59 42.1%	21 15.0%	44 31.4%	7 5.0%	8 5.7%	1 0.7%	140
Worldwide	44 34.9%	9 7.1%	29 23.0%	10 7.9%	31 24.6%	3 2.4%	126

10. How many other people were involved in the purchasing process?

None (only me)	12.1%	17
1 other person	16.4%	23
2 - 5 other people	61.4%	86
6 - 12 other people	7.1%	10
more than 12 other people	2.9%	4
	Total	140

11. What was the nature of the packaging products, services, or solution that you bought, specified, or recommended, influenced or approved the past 12 months? (you may mark more than 1 answer if needed)

Packaging equipment / machinery	39.9%	55
Packaging materials / containers / supplies	74.6%	103
Automation / controls / related components	18.8%	26
Contracted (external) packaging services / solutions provider (out sourcing)	21.7%	30
Packaging consulting services (including engineering, packaging design)	23.2%	32
other-required	0.7%	1
	Total	138

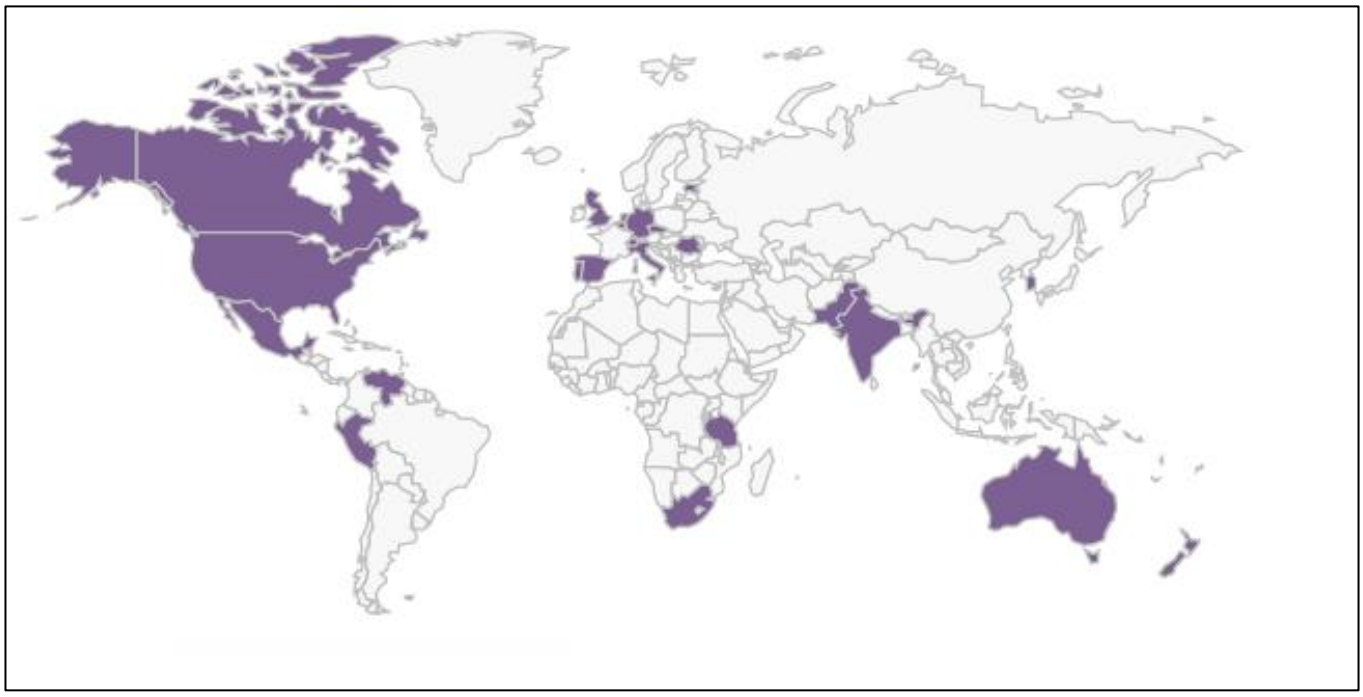
Statistics

Total Responses	138
Unanswered	332

12. How often do you buy this kind of packaging product, service, or solution?

This was the first time ever	9.4%	13
Infrequently (less than 1 time per year)	17.3%	24
Yearly (1 - 2 times per year)	28.8%	40
Repeat buy several/many times per year (e.g. production procurement)	44.6%	62
	Total	139

Appendix 2: Location Map of Survey Participants

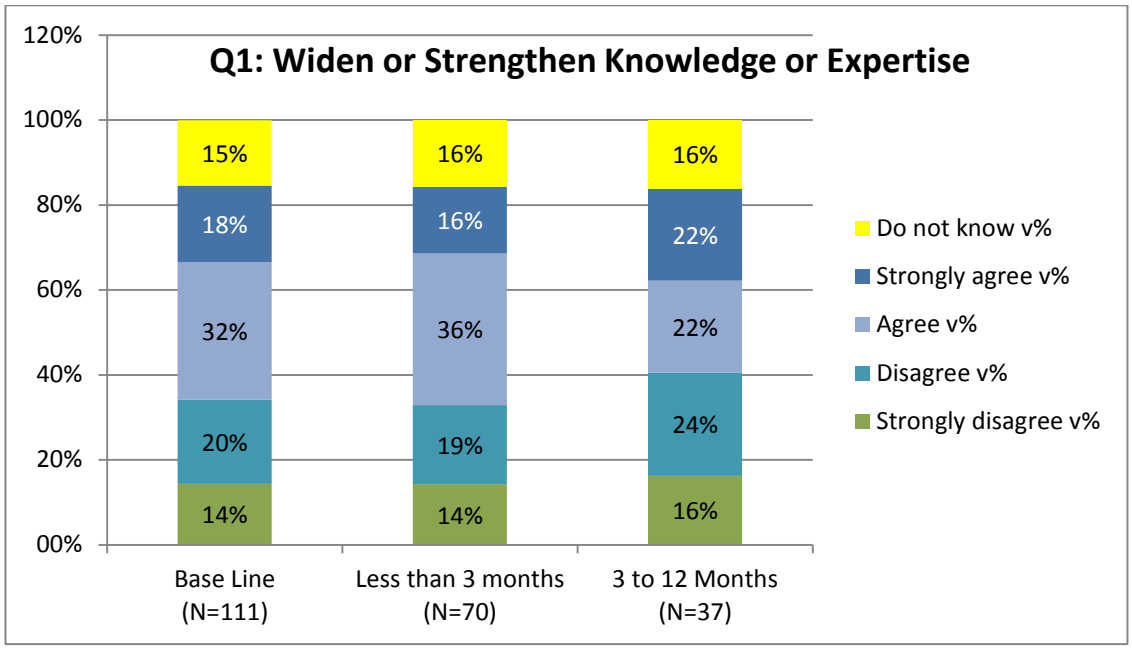


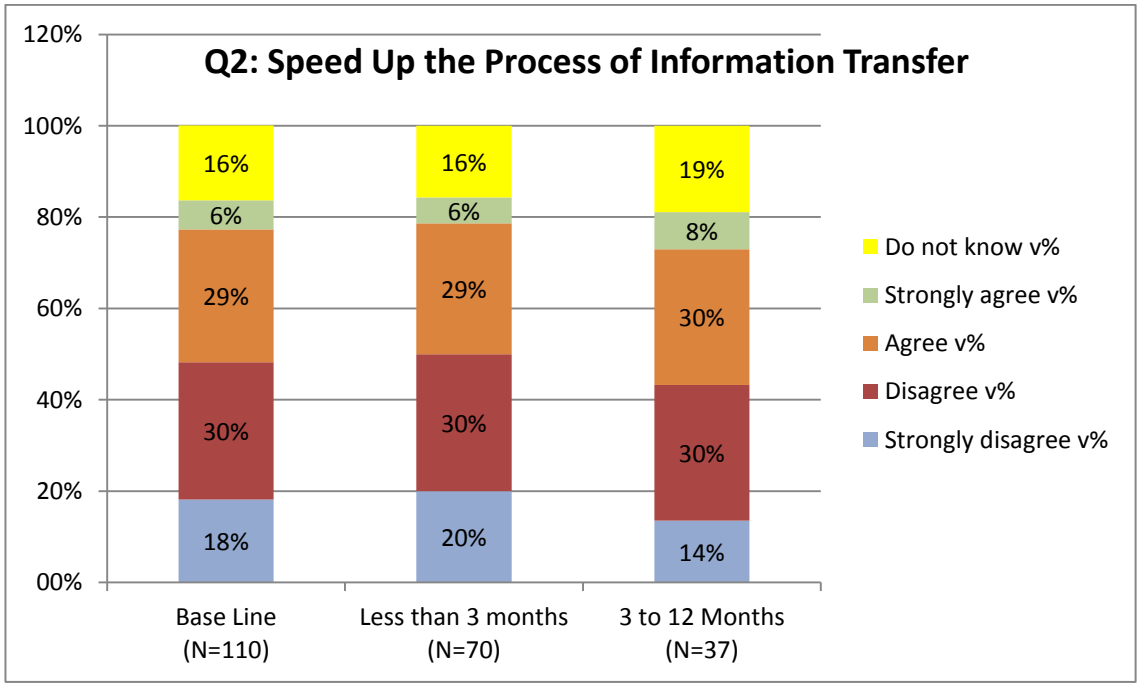
Appendix 3: Benefits of Social Media vs Packaging Experience

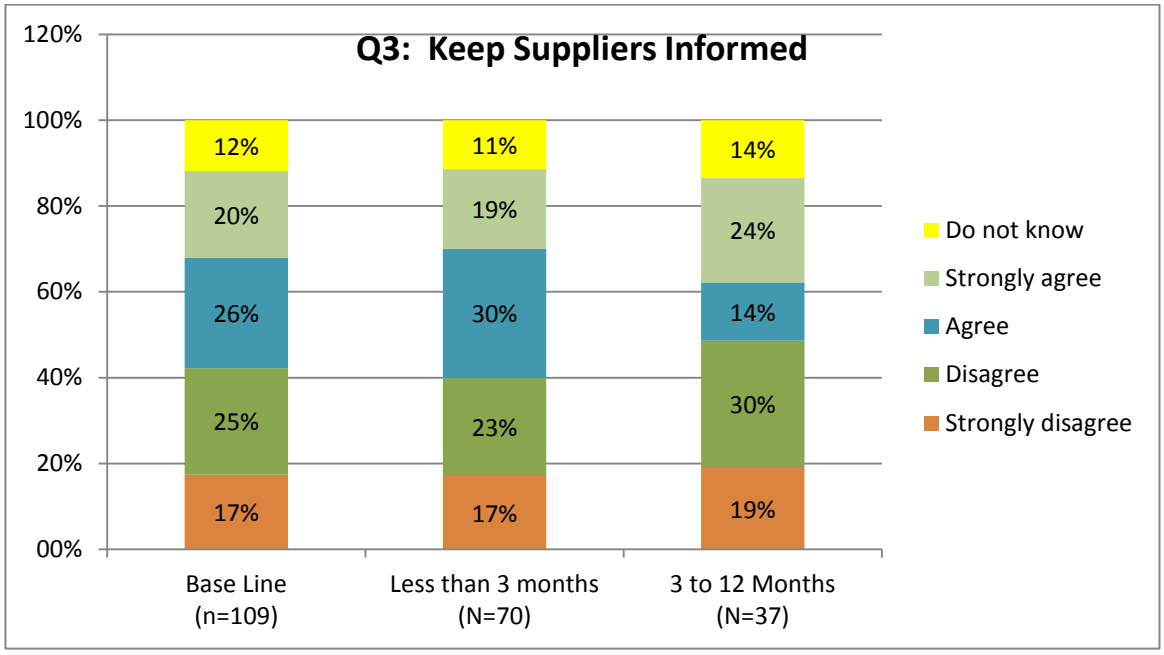
			How long have you been working in jobs related to packaging?				
			Total	Under 1 year	2-5 years	6-10 years	Over 10 years
			111	5	26	10	70
Q1: Supplier research on social media networks helped me to widen or strengthen my knowledge/expertise about a specific packaging supplier/product.	Strongly disagree		16	0	6	1	9
		%	14.4%	0.0%	23.1%	10.0%	12.9%
	Disagree		22	1	4	3	14
		%	19.8%	20.0%	15.4%	30.0%	20.0%
	Agree		36	2	9	4	21
		%	32.4%	40.0%	34.6%	40.0%	30.0%
	Strongly agree		20	1	3	2	14
		%	18.0%	20.0%	11.5%	20.0%	20.0%
	Do not know		17	1	4	0	12
		%	15.3%	20.0%	15.4%	0.0%	17.1%
			Total	Under 1 year	2-5 years	6-10 years	Over 10 years
			110	5	25	10	70
Q2: Social media channels helped me to speed up the process of information transfer to other colleagues in the buying team and have advantages over other offline sources.	Strongly disagree		20	0	5	2	13
		%	18.2%	0.0%	20.0%	20.0%	18.6%
	Disagree		33	2	7	3	21
		%	30.0%	40.0%	28.0%	30.0%	30.0%
	Agree		32	2	9	2	19
		%	29.1%	40.0%	36.0%	20.0%	27.1%
	Strongly agree		7	0	0	3	4
		%	6.4%	0.0%	0.0%	30.0%	5.7%
	Do not know		18	1	4	0	13
		%	16.4%	20.0%	16.0%	0.0%	18.6%
			Total	Under 1 year	2-5 years	6-10 years	Over 10 years
			109	5	25	10	69
Q3: Me and my supplier-counterpart keep each other informed about events or changes that may affect the other party via social media platforms.	Strongly disa		19	1	5	1	12
		%	17.4%	20.0%	20.0%	10.0%	17.4%
	Disagree		27	0	7	4	16
		%	24.8%	0.0%	28.0%	40.0%	23.2%
	Agree		28	1	4	3	20
		%	25.7%	20.0%	16.0%	30.0%	29.0%
	Strongly agree		22	2	6	2	12
		%	20.2%	40.0%	24.0%	20.0%	17.4%
	Do not know		13	1	3	0	9
		%	11.9%	20.0%	12.0%	0.0%	13.0%
			Total	Under 1 year	2-5 years	6-10 years	Over 10 years
			111	5	26	10	70
Q4: I have not derived any benefits from social media in making purchasing decisions for my organization.	Strongly disagree		12	0	2	1	9
		%	10.8%	0.0%	7.7%	10.0%	12.9%
	Disagree		29	1	6	3	19
		%	26.1%	20.0%	23.1%	30.0%	27.1%
	Agree		30	3	7	2	18
		%	27.0%	60.0%	26.9%	20.0%	25.7%
	Strongly agree		26	0	7	4	15
		%	23.4%	0.0%	26.9%	40.0%	21.4%
	Do not know		14	1	4	0	9
		%	12.6%	20.0%	15.4%	0.0%	12.9%

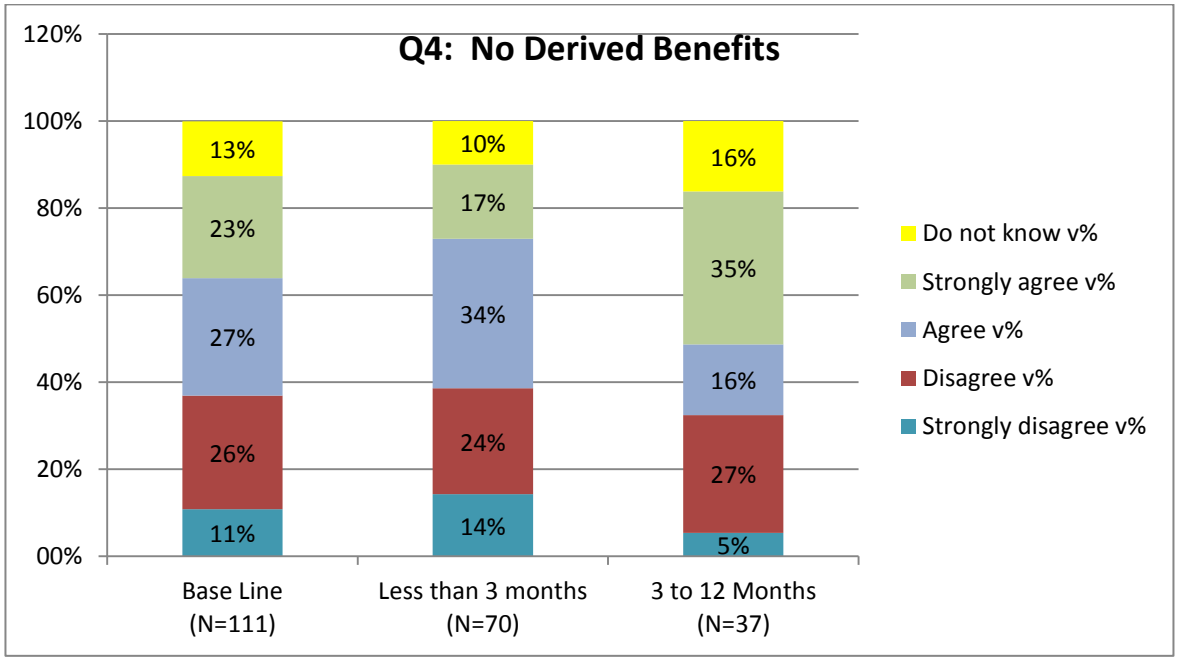
		Year of Packaging Industry Experience		
		0-10 yrs. %	Over 10 years	
	# of Respondents (N)	41	70	
Q1: Widen or Strengthen Knowledge/Expertise	Disagree & Strongly Disagree	36.6%	32.9%	Same as base data
	Agree & Strongly Agree	51.2%	50.0%	
	Don't know	12.2%	17.1%	
	# of Respondents (N)	40	70	
Q2: Speed up the process of information transfer	Disagree & Strongly Disagree	47.5%	48.6%	Same as base data
	Agree & Strongly Agree	40.0%	32.8%	
	Don't know	12.5%	18.6%	
	# of Respondents (N)	40	69	
Q3: Keep Supplier Informed	Disagree & Strongly Disagree	45.0%	40.6%	Same as base data
	Agree & Strongly Agree	45.0%	46.4%	
	Don't know	10.0%	13.0%	
	# of Respondents (N)	41	70	
Q4: No Derived Benefits	Disagree & Strongly Disagree	31.7%	40.0%	Same as base data
	Agree & Strongly Agree	56.1%	47.1%	
	Don't Know	12.2%	12.9%	

Appendix 4: Benefits of Social Media vs Length of Information Search

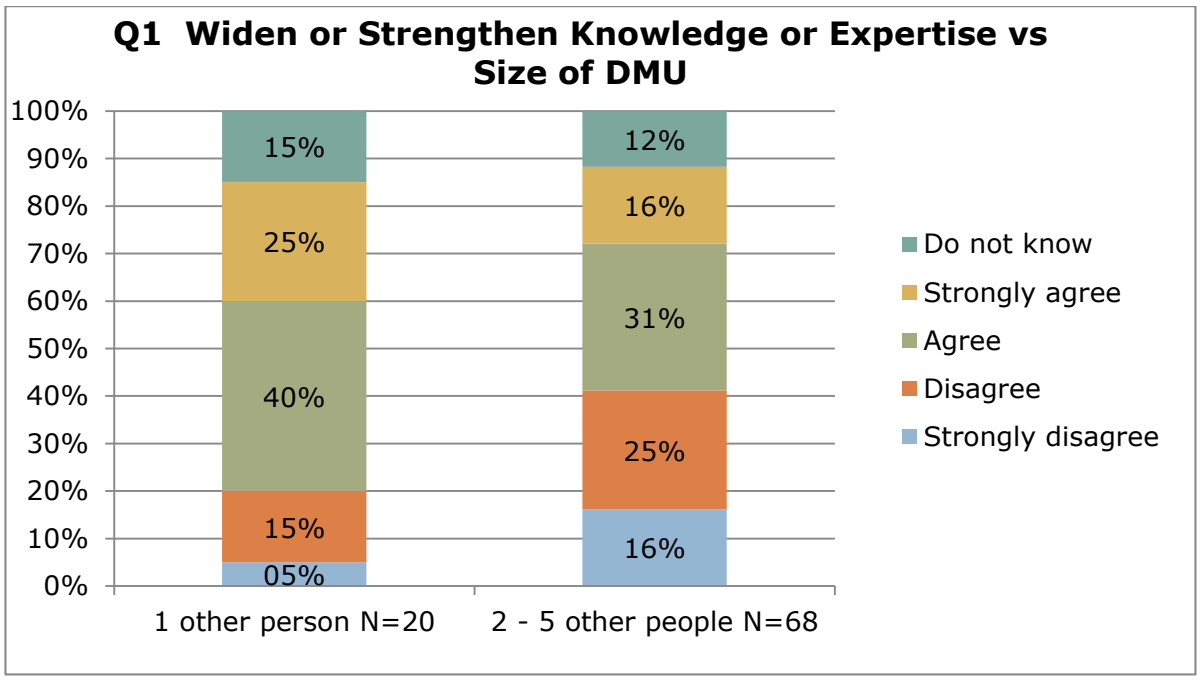





Q3: Keep Suppliers Informed
120%
100%
80%
60%
40%
20%
00%
12%
20%
26%
25%
17%
11%
19%
30%
23%
17%
14%
24%
14%
30%
19%
Base Line (n=109)
Less than 3 months (N=70)
3 to 12 Months (N=37)
Do not know
Strongly agree
Agree
Disagree
Strongly disagree

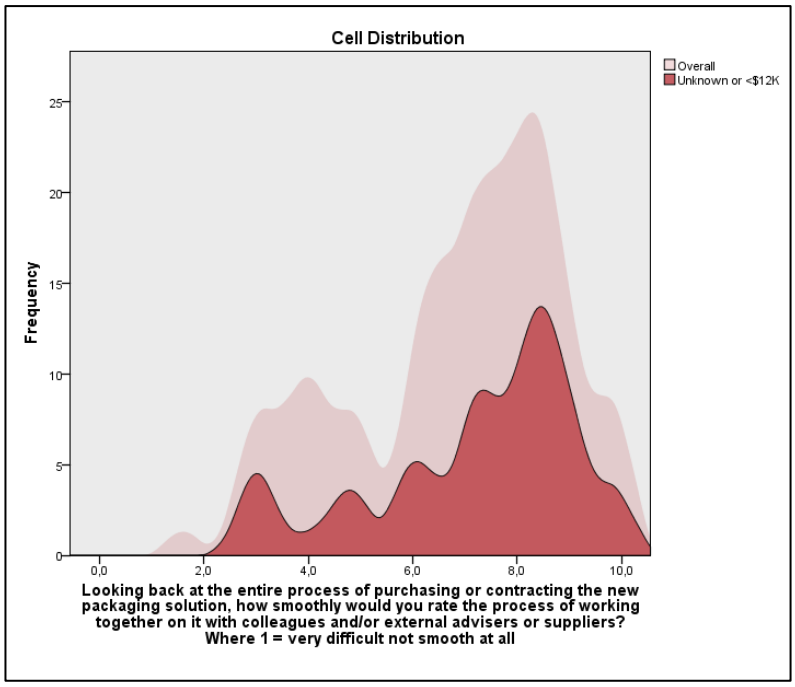

Q4: No Derived Benefits
120%
100%
80%
60%
40%
20%
00%
13%
23%
27%
26%
11%
10%
17%
34%
24%
14%
16%
35%
16%
27%
5%
Base Line (N=111)
Less than 3 months (N=70)
3 to 12 Months (N=37)
Do not know v%
Strongly agree v%
Agree v%
Disagree v%
Strongly disagree v%

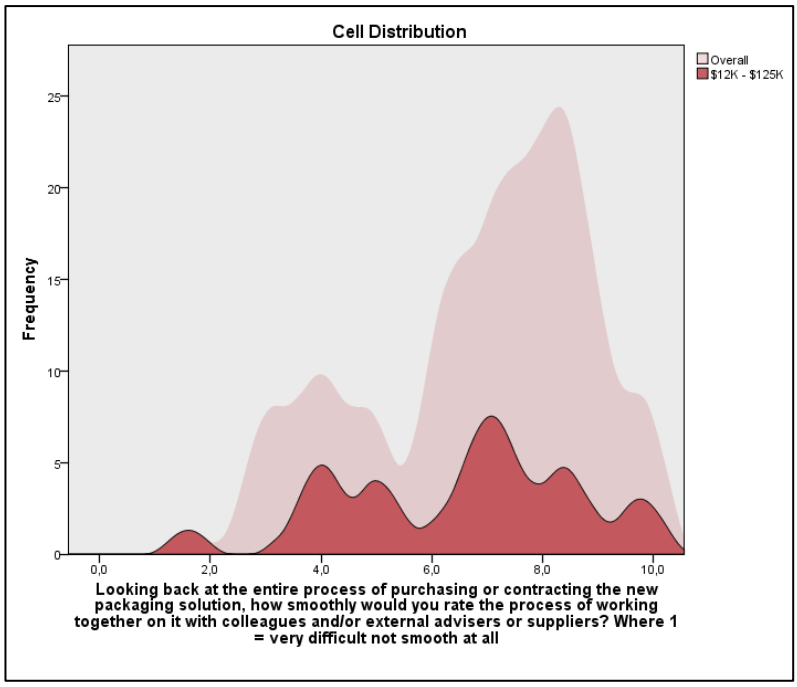
Appendix 5 Benefits of Social Media vs DMU Size

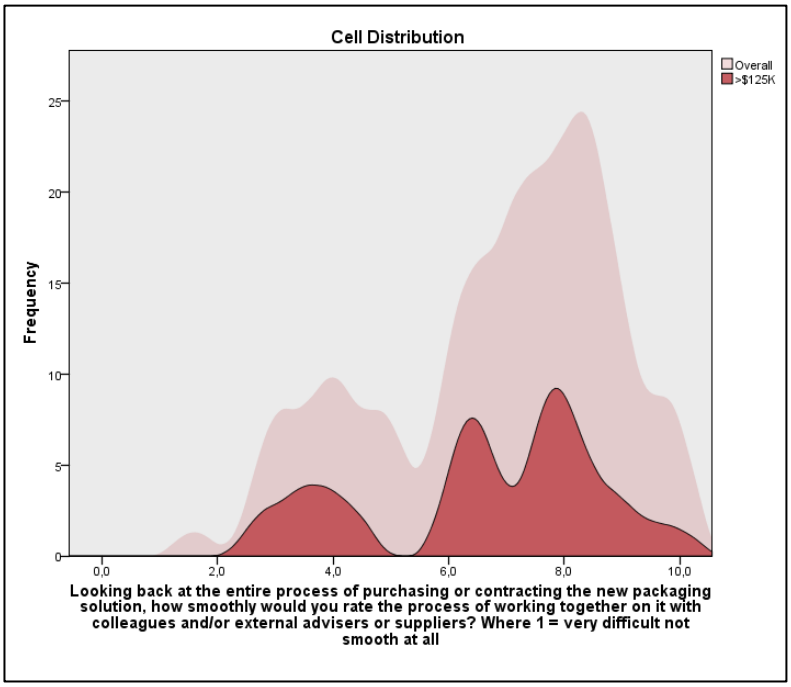


(source: Benefits of Social Media vs Number of People in Purchase Process 1.0)

Appendix 6 Smoothness of Process vs Budgetary Clusters






Cell Distribution
Overall
>$125K
Frequency
25
20
15
10
5
0
0,0
2,0
4,0
6,0
8,0
10,0
Looking back at the entire process of purchasing or contracting the new packaging solution, how smoothly would you rate the process of working together on it with colleagues and/or external advisers or suppliers? Where 1 = very difficult not smooth at all