

What Kansas Producers Want from Their Input Suppliers

Aaron J. Johnson

Logan L Britton

RISK AND PROFIT

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Audience

- Who is in the room?
 - Producer
 - Seed
 - Fertilizer / Chemical
 - Feed
 - Other
 - Student



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Thank you to CoBank and the
Arthur Capper Cooperative Center
for funding of this project.

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How important is ag supply industry?

23,290 Jobs

\$1.96B Wages

\$4.7 GDP Contribution

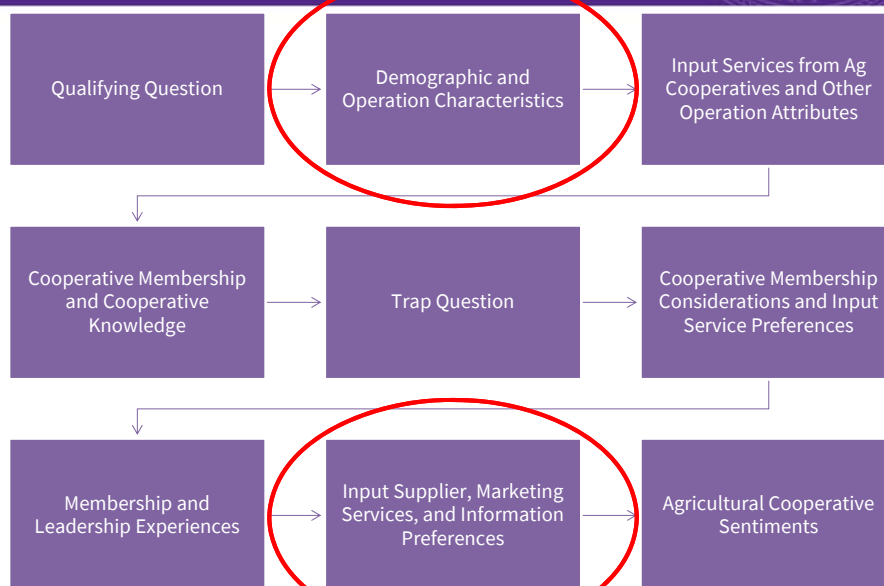
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Objective

Identify customer segmentation based on value they place on supplier attributes.



Survey Instrument

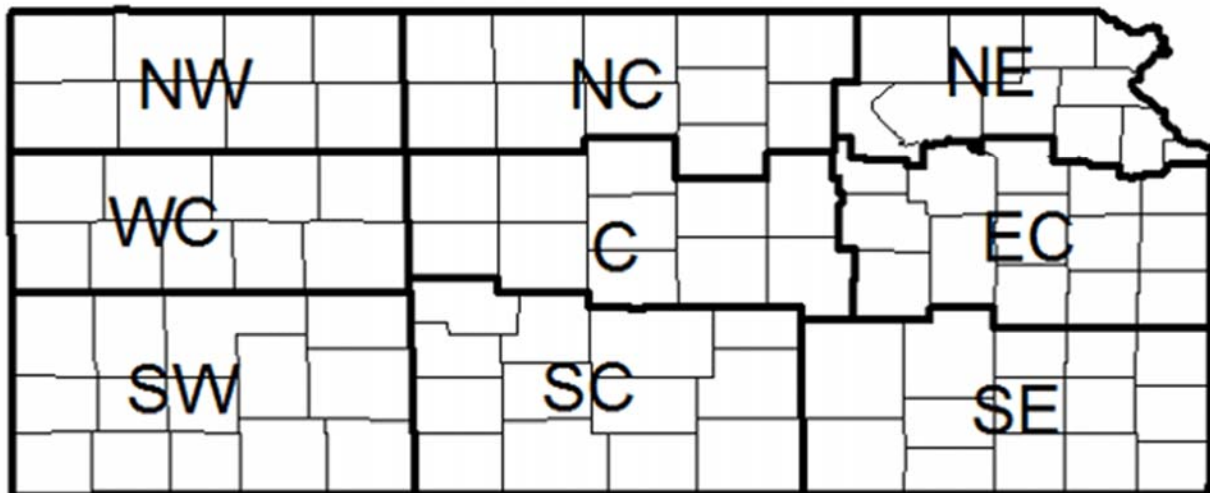


For Your Input Supplier, How Important...?

- Sense of Loyalty
- Pride of Association
- Market Access
- Community Involvement
- Ownership
- Control
- Knowledge of Staff
- Trust
- Price
- Quality
- Reputation
- Profit Share

Not Very Important (1)	Somewhat Important (2)	Moderately Important (3)	Important (4)	Extremely Important (6)	N/A (5)
☐	☐	☐	☐	☐	☐

Data and Methods



Data and Methods



KANSAS SPECIALTY CROP
GROWERS ASSOCIATION

368 Useable Responses

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Summary Statistics

Variable	%	Age	%
Male	83.11	<25 years	1.10
HS / GED	12.26	25-34	10.13
Associates/Trade	14.17	35-44	14.79
4-Year	50.14	45-54	12.61
Grad./Prof.	23.43	55-64	23.84
Co-op Member	82.02	65-74	29.31
Owner Role	86.65	75+	8.22

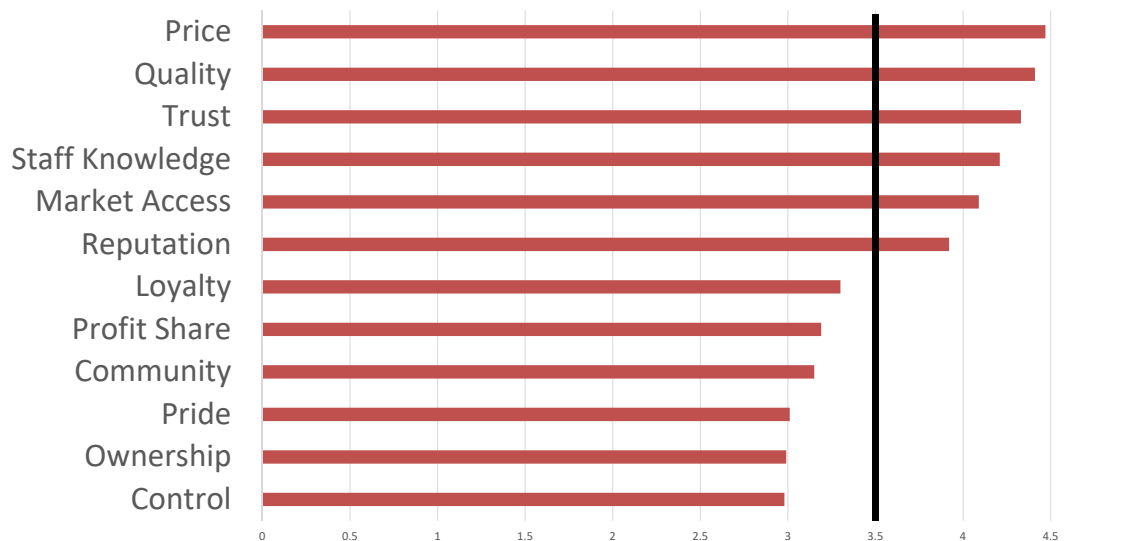
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Summary Statistics

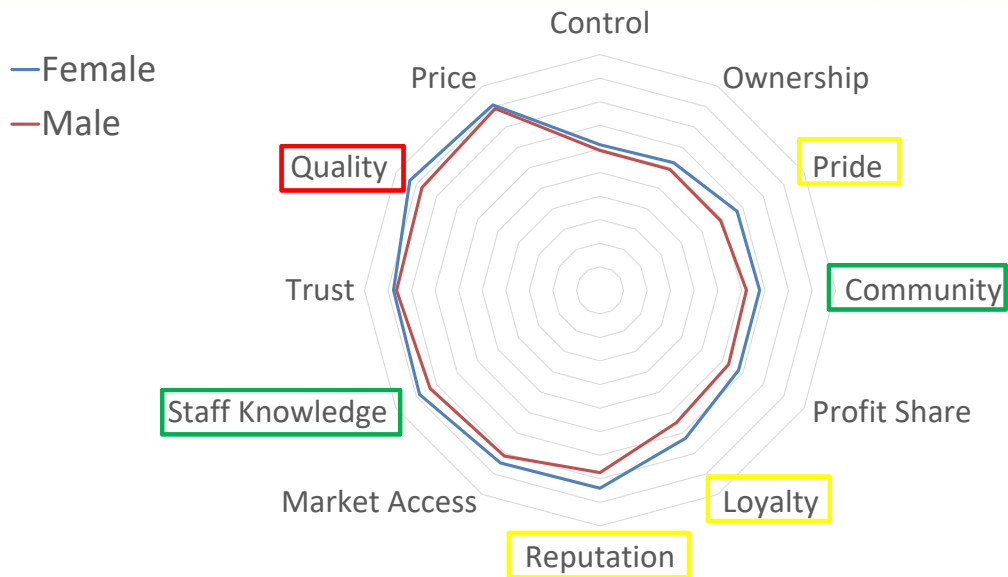
Purchases from Cooperatives

Prod./Srvc.	None	Low	Medium	High	Don't
Animal Prod.	35.41	21.25	12.75	15.58	15.01
Crop Inputs	19.03	21.02	20.74	34.66	4.55
Agronomy	35.85	24.37	13.45	17.65	8.68
Market Crops	20.06	18.84	14.97	42.09	4.24
Financing	57.22	12.46	10.76	9.35	10.20
Precision Srvc.	50.70	18.03	10.14	8.17	12.96

Results

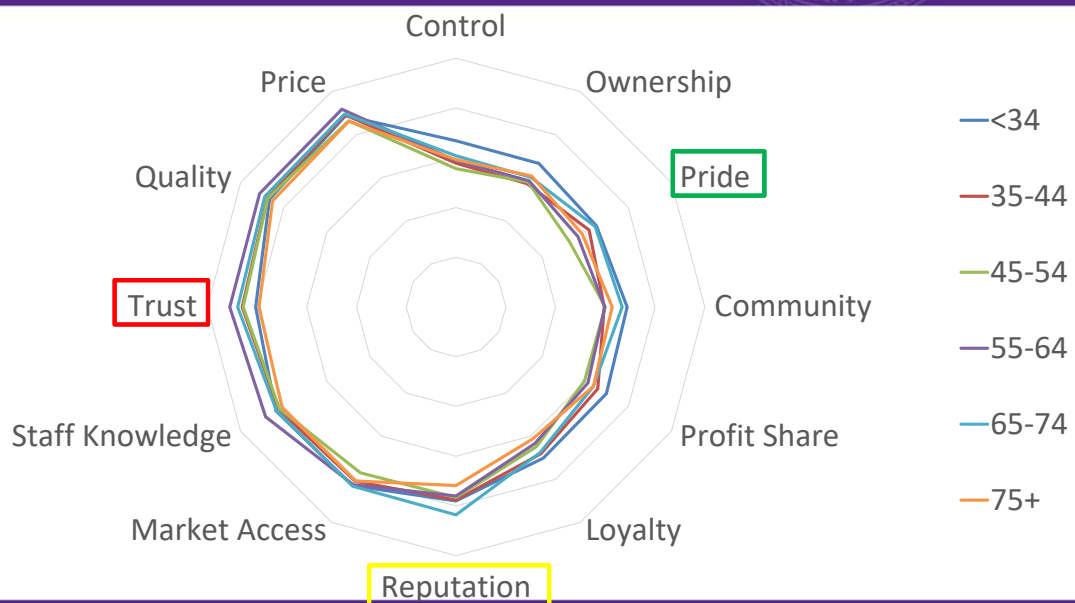


Input Supplier Preference - SEX



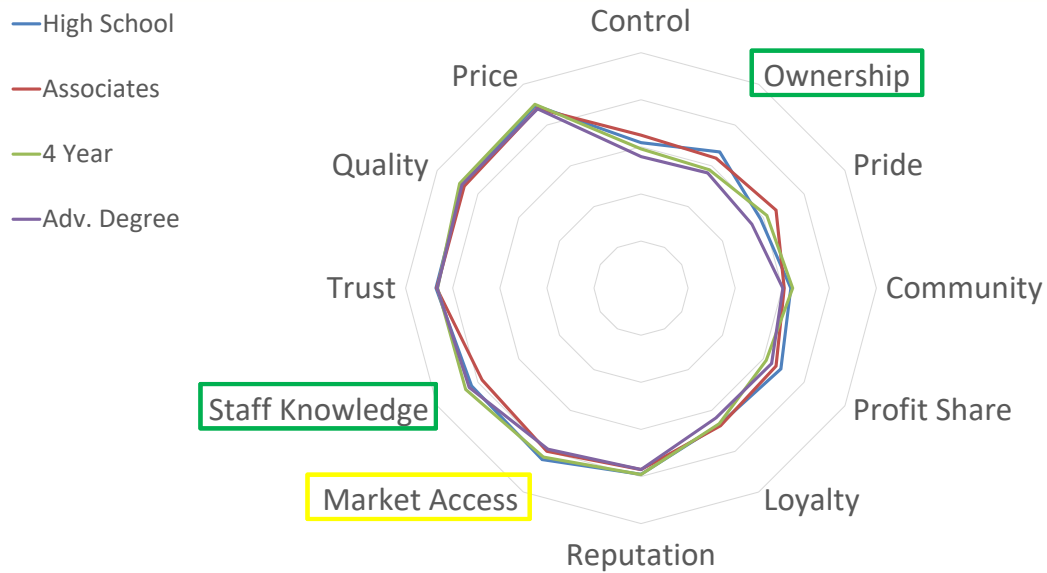
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Input Supplier Preference - AGE



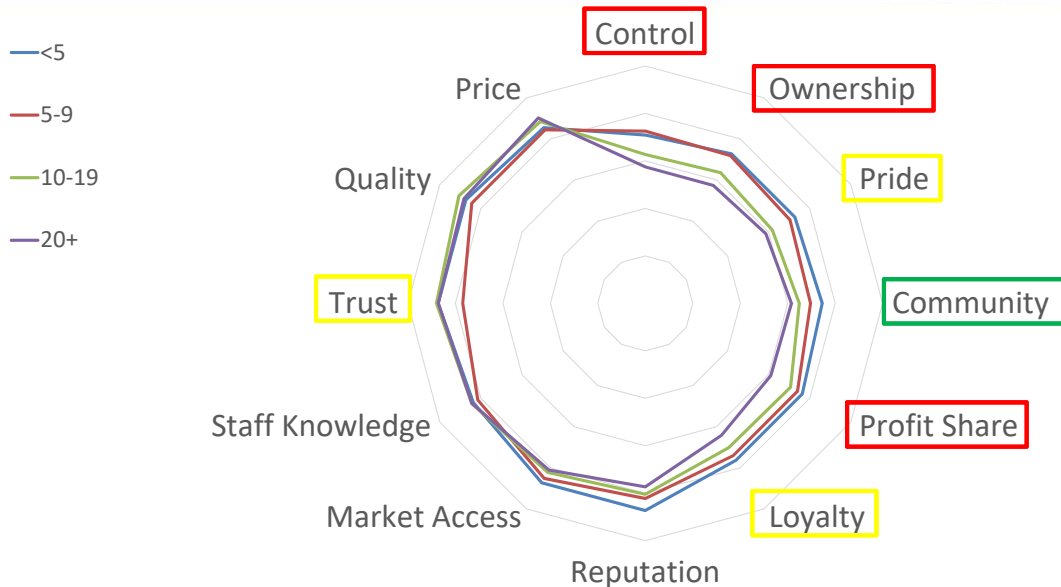
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Input Supplier Preference - EDUCATION



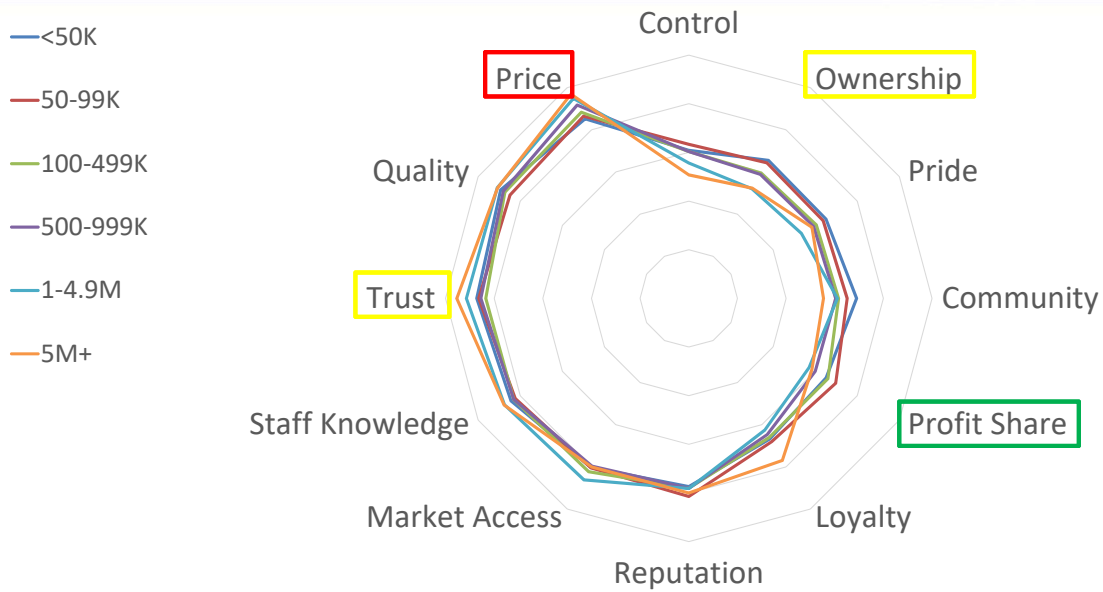
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Input Supplier Preference – YEARS IN AG



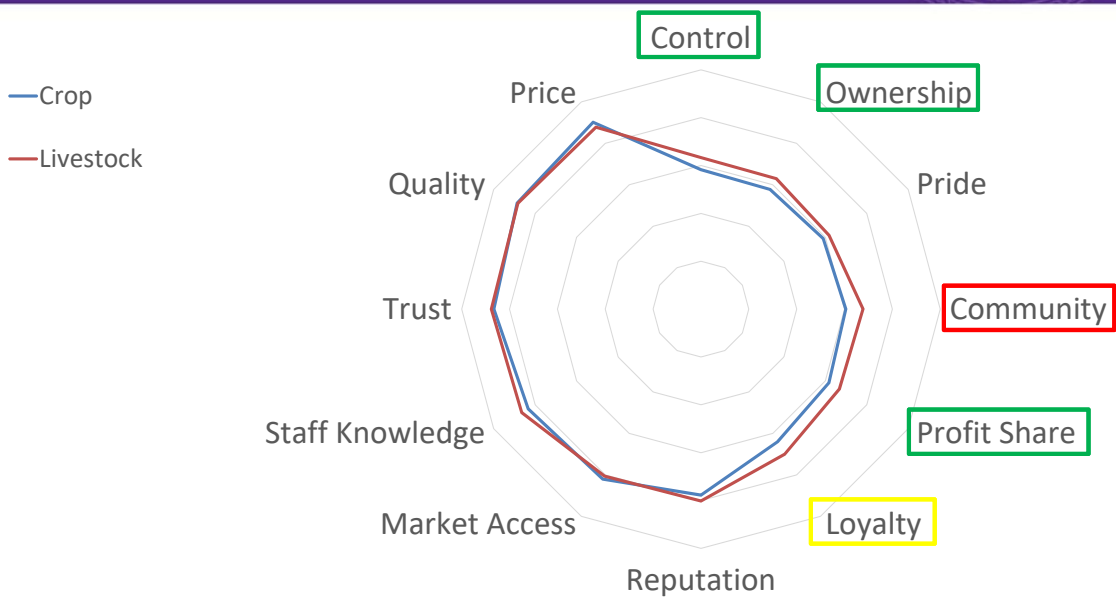
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Input Supplier Preference – AG INCOME



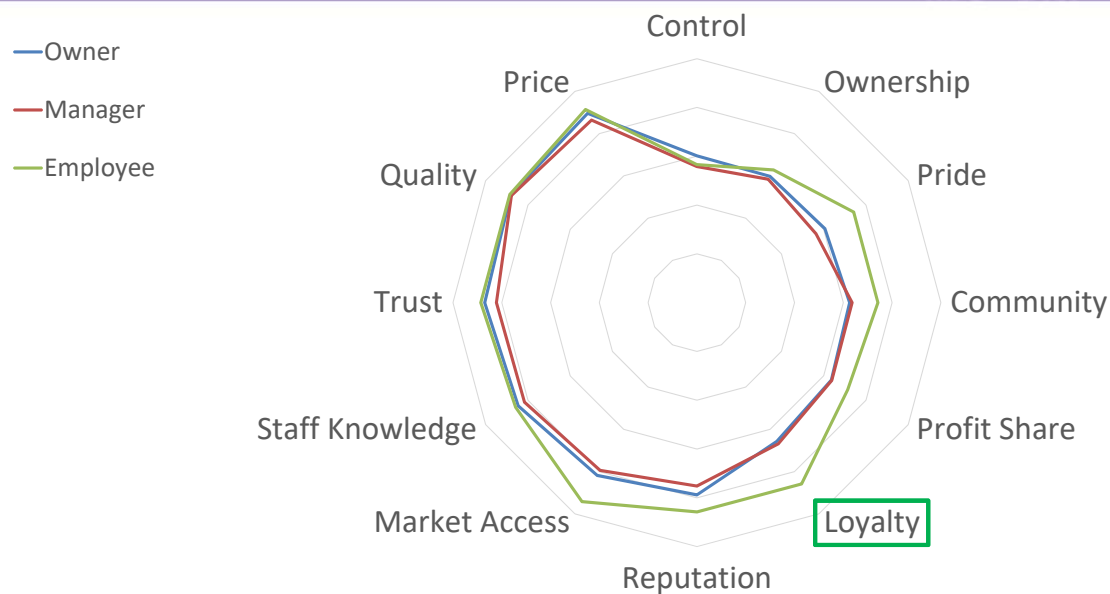
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Input Supplier Preference – MAJ. INCOME TYPE



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Input Supplier Preference – ROLE



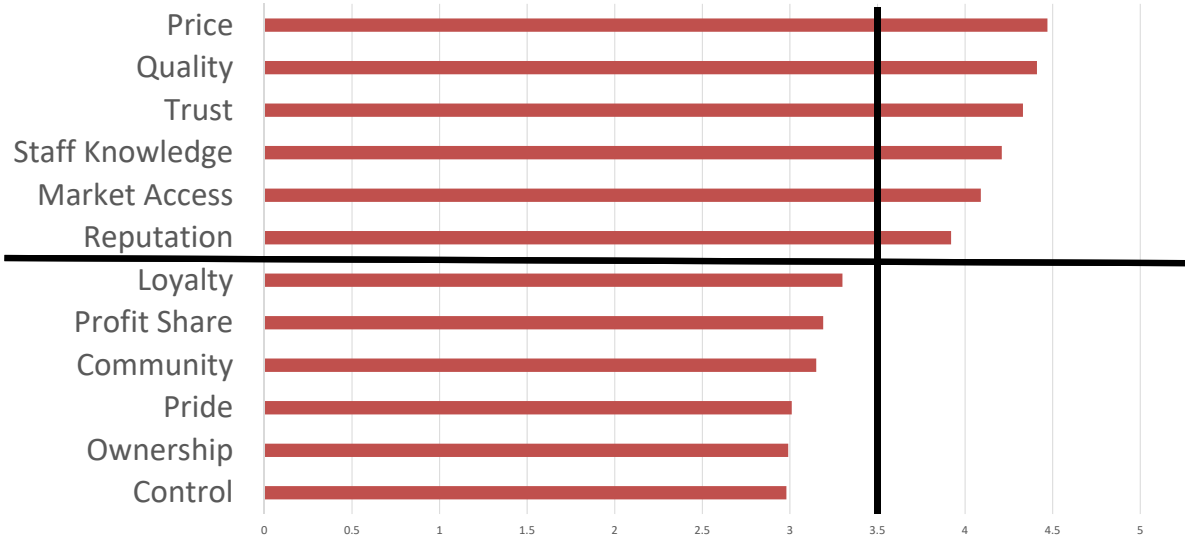
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Input Supplier Preference - SUMMARY

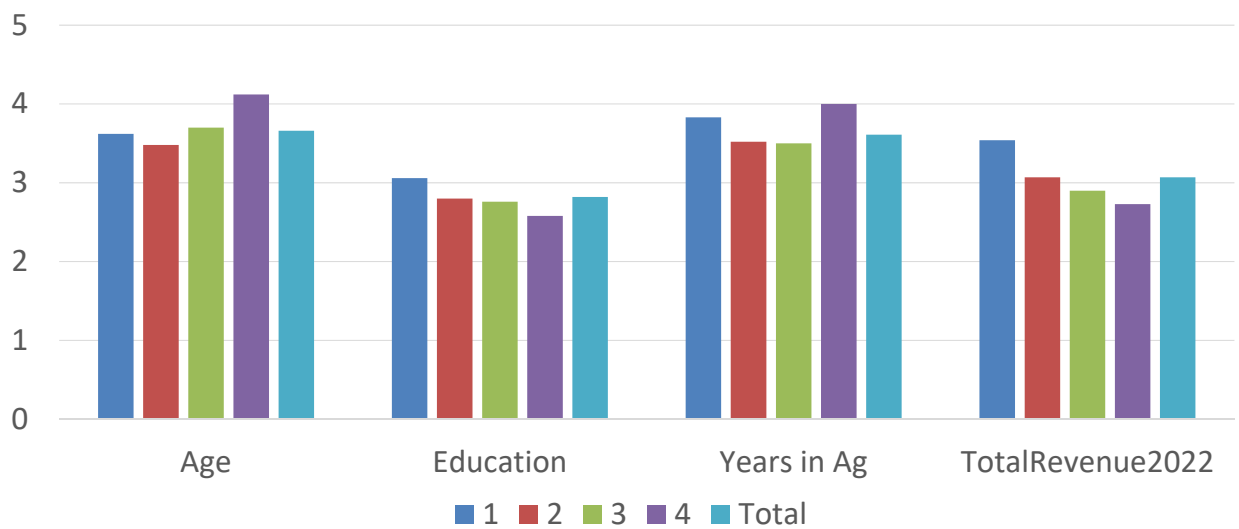
	Sex	Age	Education	Years	Ag Inc.	Inc. Type	Role
Price					1		
Quality	1						
Trust		1		5	5		
Staff Knowledge	10		10				
Market Access			5				
Reputation	5	5					
Loyalty	5			5		5	10
Profit Share				1	10	10	
Community	10			10		1	
Pride	5	10		5			
Ownership			10	1	5	10	
Control				1		10	

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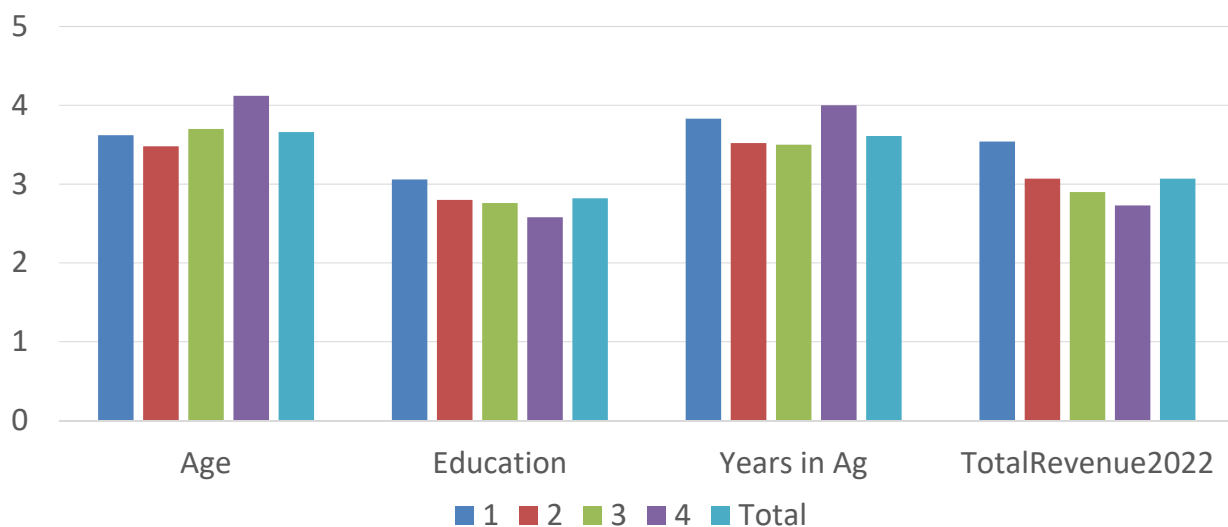
EFA Results



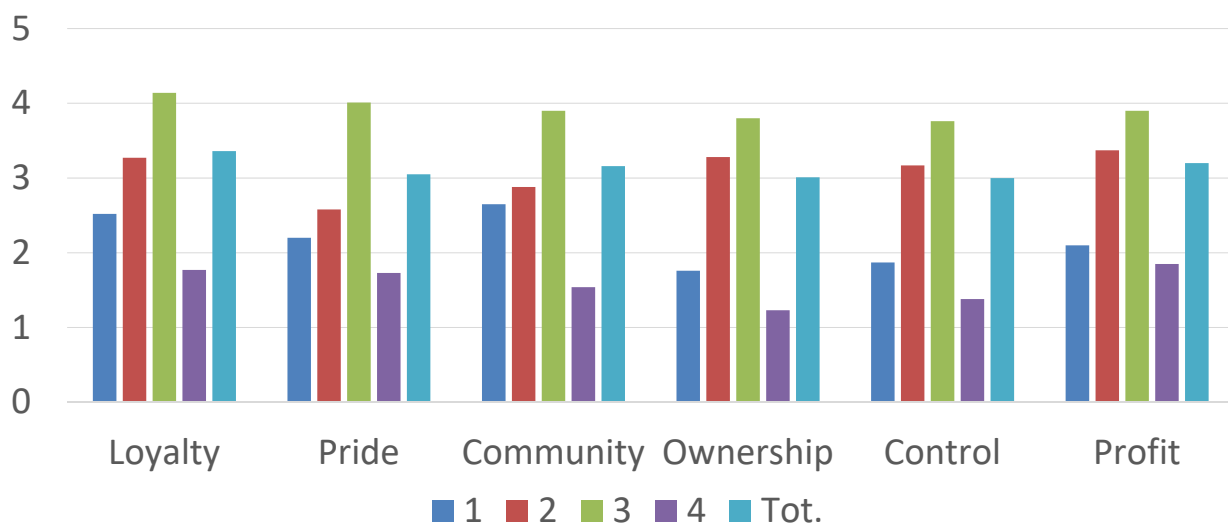
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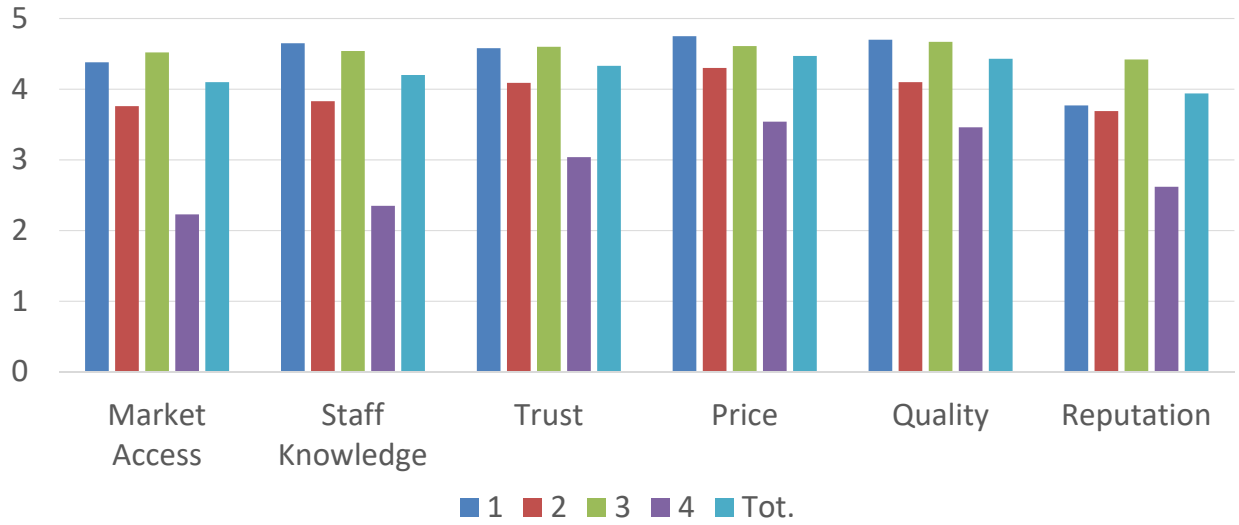
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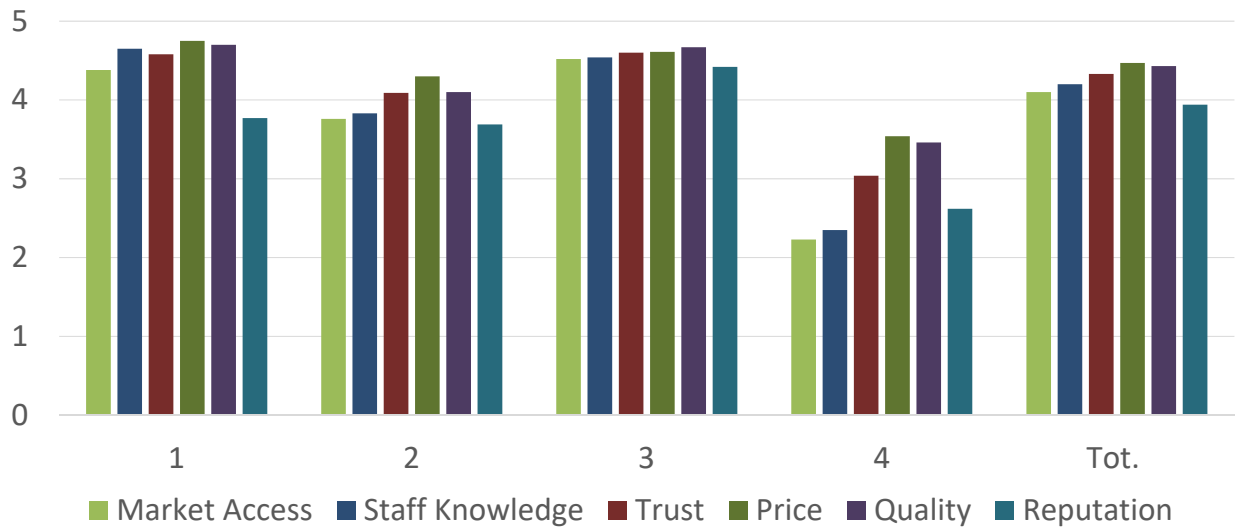
Cluster Results



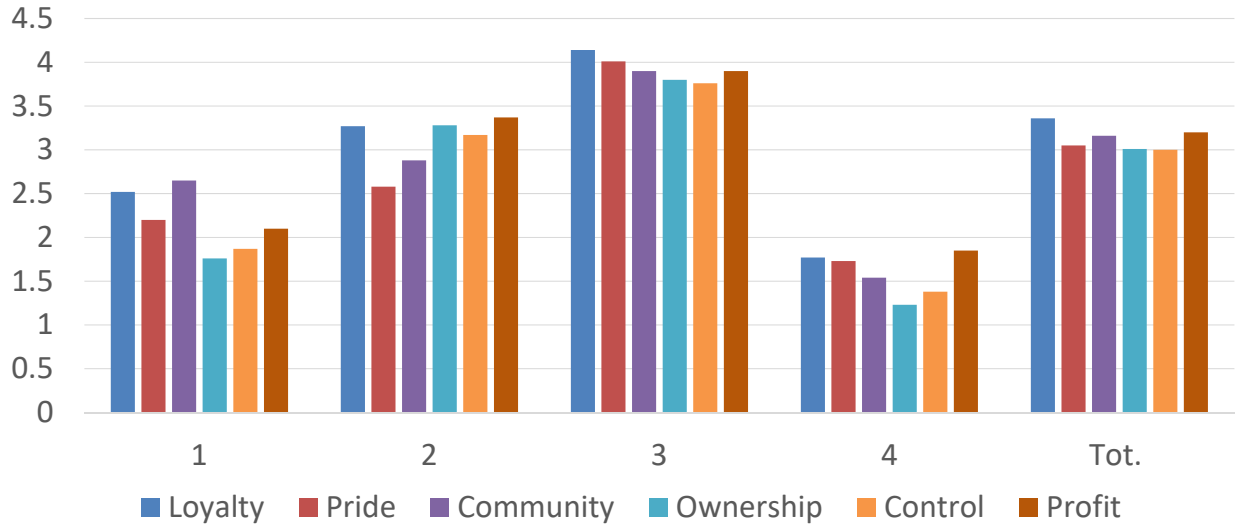
Cluster Results



Cluster Results



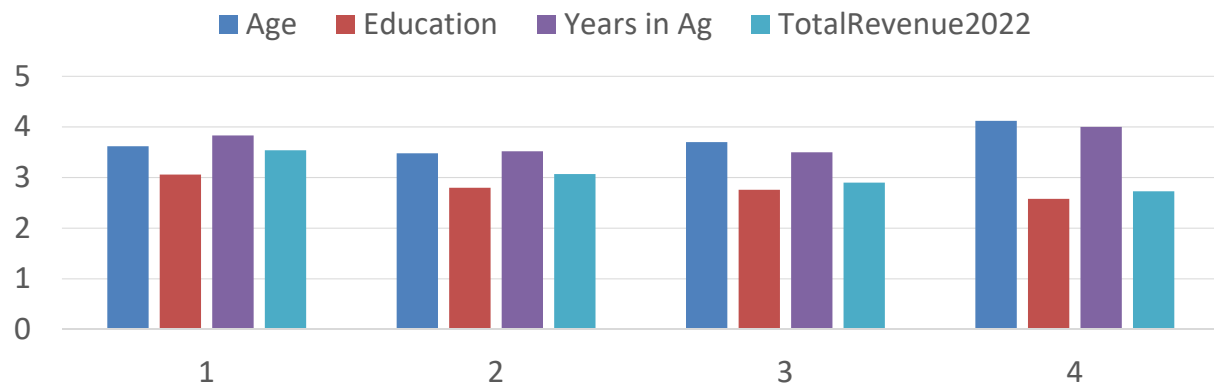
Cluster Results



Cluster Results

C1	C2	C3	C4
- Highly Educated - Highest Income	- Youngest 2nd High Income	Center Line	- Most Ag Exper. - Least Education - Lowest Income

Cluster Results



- Highly Educated
- Highest Income

- Youngest
- 2nd High Income

- Center Line

- Most Ag Exper.
- Least Education
- Lowest Income

Ordered Logit Results

	Educ.	Age	Sex	AgYrs	Ag Inc.	Role	Partners
PRICE					+		
QUALITY		+					+
TRUST				+			
STAFF KNOWLEDGE	+		+				
MARKET ACCESS		+		-	+		
REPUATION		+	+	-			

Ordered Logit Results

	Educ.	Age	Sex	AgYrs	Ag Inc.	Role	Partners
LOYALTY			+	—			
PROFIT SHARE				—			+
COMMUNITY		—		—	—		
PRIDE		+	+	—			
OWNERSHIP	—			—	—		
CONTROL	—	+		—		+	

Conclusions

- Segmentation can make a major difference
- Strategy remains but approach will differ
 - Language and emphasis chosen
 - Target segment
- Bring your A-Game with older producers

Questions



- How could you use this information?
- What other factors do you segment on?
- Do you align salesperson personality to customer personality?

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Thank you!

Questions?

Aaron Johnson
ajjohnson@ksu.edu

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Ordered Logit Results

- LOYALTY
 - Females rate higher
 - Ag longevity reduces
- PRIDE
 - Age, Female value association
 - Ag longevity reduces

Ordered Logit Results

- MARKET ACCESS
 - Age, Ag Income value access
 - Ag longevity reduces
- COMMUNITY INVOLVEMENT
 - Age, No. Partners value
 - Ag Longevity, Ag Income reduces

Ordered Logit Results

- OWNERSHIP
 - Ag longevity, Ag Income, Education reduces
- CONTROL
 - Age value
 - Ag Longevity, Education reduce
 - Managers/Employees less

Ordered Logit Results

- STAFF KNOWLEDGE
 - Female and Education values
- TRUST
 - Ag Income increases
- PRICE
 - Ag Income increases

Ordered Logit Results

- QUALITY
 - Female and No. Partners increases
- REPUTATION
 - Age and Female value
 - Ag Longevity reduces

Ordered Logit Results

- PROFIT
 - Ag Longevity reduces

Ordered Logit - LOYALTY

Or d\w	Frhiilfhq w Vg#huil }	SAij;i	^<8 (# frqil lwhuydo
oooooooooooo	oooooooooooo ooooooooooooo ooooo	oooooooo	oooooooooooo ooooo
Hgxfdwlrq	0314386; 3143;<35	031k:	31666 03164;;6 3143;394
Djh	3133;;:: 3133::5	4148	3158 03133958 3135733;
Vh{	3186938: 3159;<;	41k<	31379 3133;;: 41396577
\hdwZ runbjDj	03165768 314937<9	05135	31376 03196;<5 03133<:<
WrwdWhyhqxh5355	3137:78: 313:574<	3199	31845 0313<77; 314;<6<8
Sup du Urdh	31466948 3158<3:8	3185	31939 0316:749 319746<6
Qxp ehurisdwghw	3135338: 3134:999	4147	31589 0313478: 313879;5

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Ordered Logit - PRIDE

Subh	Frhiilfhq w Vg#huil }	SAij;i	^<8 (# frqil lwhuydo
oooooooooooo.0	oooooooooooo ooooooooooooo ooooo	oooooooo	oooooooooooo 0 ooooo
Hgxfdwlrq	03149<:: 314385:9	04194	3143: 0316:94 313698:6
Djh	313466 3133::76	41:5	313;9 031334;; 3135;7:9
Vh{	317;<:7 3159<4;6	41;5	3139< 03136::8 4134:65;
\hdwZ runbjDj	0316865: 31494596	0514<	3135; 03199<66 03136:5
WrwdWhyhqxh5355	03143534 313:4:55	04175	31488 0315758< 3136;88<
Sup du Urdh	03145638 3157:486	0318	3194< 03193:79 31694696
Qxp ehurisdwghw	31359965 3134:<<9	417;	3146< 03133;97 31394<37

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Ordered Logit – MARKET ACCESS



P dnhWffhvv	F rhiilfhqWvg1#huil }	SAi}i	^<8 (#	frqil	hwhuydo
oooooooooooooooo	oooooooooooo ooooooooooooo ooooooooooooo	oooooooooooo	oooooooooooo	oooooooooooo	oooooooooooo
Hgxfdwlrq	03149838 314466:	04179	31478	0316;:58	3138:48
Djh	3134<8545 3133;3<5	5174	31349	3133699	313686;5
Vh{	31749:486 315;533<	417;	3146<	03146934	31<9<776
\hdwZ runbjDj	0316;5;55 314:34:5	05158	31357	031:4968	03137<5<
WrwdW hyhqxh5355	314999795 313:9659	514;	3135<	3134:38	31649575
Sup du Urdh	31397<::9 315:7;6;	3157	31;46	0317:6:	3193698
Qxp ehurisdughw	3134;3366 31354;:5	31;5	3174	031357;;	31393;:6

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Ordered Logit - COMMUNITY



Frp p xqlw#	F rhiilfhq	SAi}i	^<8 (#	frqil	hwhuydo
Iqyrqhp hqw	w Vvg1#huil }	SAi}i	frqil	hwhuydo	
oooooooooooooooo	oooooooooooo ooooooooooooo ooooooooooooo	oooooooooooo	oooooooooooo	oooooooooooo	oooooooooooo
Hgxfdwlrq	0313;568 3143883;	031;	31768	0315;<47	3145777
Djh	313498<5 3133:::<	5146	31366	31334678	31364;7
Vh{	3153<795 31598<84	31:<	31764	031644:<	31:63:49
\hdwZ runbjDj	0315:374 314967;7	04198	313<;	0318<3;6	31383346
WrwdW hyhqxh5355	03147;8: 313:76:8	05	31379	0315<767	031335;
Sup du Urdh	3149479< 315936;6	3195	31868	03167;;:	319:4;4
Qxp ehurisdughw	3139<69< 3137397;	41:4	313;;	0313436	3147<36:

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Ordered Logit - OWNERSHIP

R z qhwkls	FrhiilfhqWwgl#hu1 }	SAij;i	^8(#Frqilbwhuydo
0000000000000000	0000000000 0000000000 0000000	00000000	00000000000 000000000
Hgxfdwlrq	031635:: 3143:::5	051;4	31338 031847 0313<487
Djh	313457<< 3133:988	4196	31436 03133584 3135:836
Vh{	313<8559 3159;;78	3168	31:56 031764: 31955486
\hdwZ runbjDj	03183;<: 31498584	0613;	31335 031;65;8 0314;83;
WrwdW hyhqxh5355	03148;;5 313:5<55	0514;	3135< 031634:7 031348<
Sup du Urdh	0315494< 3157<9	031;:	316;9 031:387 315:6346
Qxp ehuriSduqhw	313494;< 3134;49	31;<	316:6 03134<7 31384::5

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Ordered Logit - CONTROL

Frqwro	FrhiilfhqWwgl#hu1 }	SAij;i	^8(#Frqilbwhuydo
0000000000000000	0000000000 0000000000 0000000	00000000	00000000000 000000000
Hgxfdwlrq	03155:3< 3143::;<4	0514	31368 03176;88 03134896
Djh	313466;7 3133:<:4	419;	313<6 03133557 3135<33:
Vh{	313;785: 3159:44;	3165	31:85 03176<35 3193;39<
\hdwZ runbjDj	03196;5; 314:4954	061:5	3 031k:798 031634<4
WrwdW hyhqxh5355	03136:39 313:653<	03184	31946 0314;388 3143975:
Sup du Urdh	03196::9 3159;65:	0516;	3134: 0414969: 031444;8
Qxp ehuriSduqhw	3135<739 3134;5;4	4194	3143; 03133975 31398569

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Ordered Logit – STAFF KNOWLEDGE

Vwli#Nqrz dngjh	FrhiilfhqWwgl#huil }	SAij;i	^<8(#Frqilbwhuydo
oooooooooooooooooooo	ooooooooooooo oooooooooooooo ooooooo	oooooooooooo	oooooooooooooooooooooooooooo
Hgxfdwlrq	314;93< 3144598	4198	313<< 031367: 31739;;
Djh	31334<:9 3133;55;	3157	31;4 03134748 3134;436
Vh{	319;7:95 315<;749	515<	31355 313<<;:: 4159<979
\hdwZ runbjDj	3139:4<6 314:7:35	316;	31:34 0315:855 3173<935
WrwdWhyhqxh5355	313<;;99 313::487	415:	31539 03138764 31585377
Sup du Urdh	03148<;4 315;4565	0318:	318: 031:4435 316<46<4
Qxp ehuriSduqhw	03134:8: 3134:695	04134	31645 0313849 3134979

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Ordered Logit - TRUST

Wuxvw	Frhiilfhq w Vwgl#huil }	SAij;i	^<8(# frqil bwhuydo
oooooooooooooooooooo	ooooooooooooo oooooooooooooo ooooooo	oooooooooooo	oooooooooooooooooooooooooooo
Hgxfdwlrq	0313:33: 31449;64	0319	3187< 0315<<38 3148;<49
Djh	3133838: 3133;6;;	319	3187: 0313446; 313547<9
Vh{	316<57;7 31634<47	416	314<7 0314<<59 31<;7558
\hdwZ runbjDj	3144;6<5 314:4;38	319<	317<4 03154;67 31788456
WrwdWhyhqxh5355	31479638 313::9;;	41;9	31396 03133:<5 3163385<
Sup du Urdh	03147:34 315::384	03186	318<: 0319<4<; 316<:<97
Qxp ehuriSduqhw	0313377< 3134:935	03158	31:<< 03136;<< 31363345

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Ordered Logit - PRICE

SulfhFrp s1	Frhiilfhq w	Vg1#huil }	SAij;i	^<8 (# frqil	hwhuydo
oooooooooooo	oooooooooooo	oooooooooooo	oooo	oooooooooooo	oooooooooooo
Hgxfdwlrq	0313654<	314539;9	0315:	31:<	03159;:6 31537685
Djh	031338;6	3133;<6<	03198	31847	03135668 313449;<
Vh{	3178577:	31643;4:	4179	31478	031489:7 41394969
\hdwZ runbjDj	315;<:88	314;7349	418:	31448	0313:3<4 3198374<
WrwdWhyhqxh5355	3164496:	313;9;	618<	3	31474846 317;4:94
Sup du Urdh	031547;	31643339	031:4	317:8	031;5<3; 316;9459
Qxp ehurisdughw	3139<4::	31393:9<	4147	31588	03137<<6 314;;5;4

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Ordered Logit - QUALITY

Txddw	Frhiilfhq w	Vg1#huil }	SAij;i	^<8 (# frqil	hwhuydo
oooooooooooo	oooooooooooo	oooooooooooo	oooo	oooooooooooo	oooooooooooo
Hgxfdwlrq	313;<;5	3144:<87	31:9	31779	0314746: 31654339
Djh	3133994:	3133;:34	31:9	3177:	03134377 313569:
vh{	4138;;;9	316683:	6149	31335	31735494 41:48944
\hdwZ runbjDj	313:<;4:	314;8597	3176	3199:	0315;65< 31775<5:
WrwdWhyhqxh5355	31466::	313;596;	4195	31438	03135;4< 315<8:7:
Sup du Urdh	031665:7	315<9::8	04145	31595	0314776 3157;<76
Qxp ehurisdughw	3146:547	313:5;;6	41;;	3139	03133897 315;3396

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Ordered Logit - REPUTATION

Uhsxwlrq	FrhiifhqwWg1#u1 }	SAij;	^8(#Erqilqwhuyd
oooooooooooooooo	ooooooooooooo oooooooooooooo ooooooo	oooooooooooo	oooooooooooooooooooooooooooo
Hgxfdwlrq	03138355 31444<3;	03178	31987 03159<88 3149<44<
Djh	31356484 3133;64;	51;	31338 31339;7; 3136<786
Vh{	31:594;< 315;:337	5186	31344 314969:4 415;;:39
\hdwZ runbjDj	0318:;<8 314::655	06159	31334 031<597< 0315647
WrwdWhyhqxh5355	31434378 313:933<	4166	314;7 03137:<6 3158334<
Sup du Urdh	03165::< 31599<7:	04156	3154< 031;83<< 314<874<
Qxp ehurisdwghw	3133<956 31357936	316<	319<9 03136;9 3138:;76

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Ordered Logit – PROFIT SHARE

SurilWkdth	FrhiifhqwWg1#u1 }	SAij;	^8(#Erqilqwhuyd
oooooooooooooooo	ooooooooooooo oooooooooooooo ooooooo	oooooooooooo	oooooooooooooooooooooooooooo
Hgxfdwlrq	03149399 3143997:	04184	31465 03169<9< 3137;694
Djh	3133;<:5 3133:;46	4148	31584 03133967 313575;8
Vh{	31556:4< 3159349:	31;9	316< 0315;95 31:66969
\hdwZ runbjDj	03183:<: 31499998	06138	31335 031;6796 0314;465
WrwdWhyhqxh5355	0313<374 313:6397	04157	31549 03156694 31385:<7
Sup du Urdh	03143:55 31577547	03177	31994 0318;8;; 316:4768
Qxp ehurisdwghw	31348988 3134:;<	31;;	316;5 03134<74 31383:4;

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