



## **Integration of ICT in Supply Chains Survey**

The goal of this survey is to collect true and accurate information on the integration of ICT in the supply chain in national companies, with the sole purpose of measuring their performance and promoting their improvement. Therefore, we suggest that you answer with the greatest possible objectivity.

General Data

Please fill in the following spaces with an X as appropriate.

Location of the com	ipany:									
□ Tijuana	□ Mexicali	□ Tecate	□ Ensenada							
Sector to which it belongs:										
$\square$ Food industry										
☐ Manufacture of cl	othing									
☐ Printing and relat	ed industries									
☐ Plastic and rubbe	r industry									
☐ Manufacture of p	roducts based on non-	-metallic minerals	3							
☐ Manufacture of m	netallic products									
☐ Manufacture of co	omputer equipment, c	ommunication, el	ectronic components, and accessories							
☐ Manufacture of a	ccessories, electrical ap	ppliances, and ele	ctrical power generation equipment							
☐ Manufacture of fu	ırniture and mattresse	es								
☐ Other industry (S	pecify):									
Company size by n	umber of employees:									
□ 11–30 □ 31	.–50 □ 51–100	□ 101–250	☐ More than 251							
Hierarchical Positio	on in the Company:									
□ Manager	$\square$ Supervisor	$\square$ Operator								
Years in the position	n:									
□ less than 2 years	□ 2–5 years	□ 5–10 years	□ more than 10 years							
Gender of the respo	ondent:									
□ Female	□ Male									

Success factors. Please mark with an X the degree of integration, according to what you assign in the elements of each of the following sections considering the following scale:

Scale	Degree of integration
1	Null
2	Mínimum
3	Regular
4	Sufficient
5	High

1. **Planning activities**. Please answer the elements according to the level of perception of the scale of importance mentioned above.

		D	egree	of inte	egratio	n
А. Т	To what extent do you consider that management integrates ICT	1	2	3	4	5
1	At regular meetings.					
2	In the activities of the company.					
3	In the necessary changes in collaboration within the company.					
4	In business processes.					
5	In decision-making.					
6	In the Investment of new products.					
B. T	o what extent is the availability of access to information perceived?	1	2	3	4	5
7	With enough computer equipment in your organization.					
8	With enough ICT professionals in your organization.					
9	With the knowledge necessary for the use of ICT.					
10	With a person (or group) of developers available to give support in the software.					
11	With retrieving information about suppliers, customers, and competitors.					
12	With gathering and processing the data to meet the client's needs.					
C. I	ndicate the degree of integration of ICT in periodic training to	1	2	3	4	5
13	The users of Information Technology in the changes, skills, and importance of					
13	the accuracy of the data and responsibilities.					
14	Users of the information system with regular assistance to a formal training					
14	program that meets the required requirements.					
15	The users of the information system with training teams for each job.					
D.	Indicate the perception of the degree of integration of ICT in software					
con	configuration		2	3	4	5
16	That satisfies all the needs in the organization of processes.					
17	That adapts to the modifications required by the processes of the organization.					
18	That is compatible with the business practices of the organization (data).					

2. **Implementation activities.** Please answer the elements according to the level of perception of the scale of importance mentioned.

				of int	egrati	on
E. I	ndicate the perception of the degree of integration of ICT in the					
imp	rovement of	1	2	3	4	5
19	The strategic management of the production process.					
20	The relationship with suppliers.					
21	The logistic processes.					
22	Delays in the distribution process.					
23	Production planning.					
24	Maintenance planning.					
F. Ir	ndicate the degree of integration of ICT in	1	2	3	4	5
25	Effectiveness in operations.					
26	Productivity of operations.					
27	Performing tasks in the work area.					

Sustain	ability <b>2019</b> , 11, × FOR PEER REVIEW				3 (	of 5
G. In	dicate the degree of integration of ICT in the ease of use of IT (EDI, Internet, e-mail,					
B2B)	on	1	2	3	4	5
28	Production processes.					
29	Maintenance management.					
30	Meet customer requirements.					
31	Improve customer service.					
32	Improve decision making in production.					
H. In	dicate the degree of integration of ICT in	1	2	3	4	5
33	Inventory management with suppliers and customers.					
34	Effectiveness of operations.					
35	Management of material requirements planning.					
36	Production control management.					
37	Coordination of suppliers with production lines.					
38	Introduce new products and services.					
39	Respond to market changes.					

3. **Control activities.** Please answer the elements according to the level of perception of the scale of importance mentioned.

		De	gree	of int	egrat	ion
I. Ir 	dicate the degree of integration of ICT in the company's capacity to	1	2	3	4	5
40	Search and renew the most modern information technology.					
41	Effectively use data exchange.					
42	Maintain the information system.					
43	Maintain a solid data network with suppliers and customers to monitor and evaluate the exchange of information.					
J. In	dicate the degree of integration of ICT in the data of the organization					
wit		1	2	3	4	5
44	Suppliers.					
45	Commercial customers.					
46	With suppliers and customers in product development processes.					
47	Managing activities and relationships with suppliers.					
48	Managing customer demand.					
49	Inventory management materials.					
50	Order management and delivery compliance.					
51	Tracking customer order.					
K. I	ndicate the degree of integration of ICT in the documentation and					
eva	uation of	1	2	3	4	5
52	Purchasing and sales systems.					
53	Planning and programming of the activities of the organization.					
54	Of the software used in the information system.					
55	Warehouse management systems.					
L. I	ndicate the degree of integration of ICT in the information advantage					
in	in		2	3	4	5
56	The various internal information systems.					
57	Internet capability of the organization.					

58	Provide high quality services.			
59	The internal computer network system.			
60	The trends of the electronic market.			

4. **Benefits for the client**. Please answer the elements according to the level of perception of the scale of degree of benefit 1-5 (where 1 = null 5 = high).

					enef	it
M. I	M. Indicate the degree of benefit when integrating ICT in		2	3	4	5
61	Flexibility of the systems to meet customer needs.					
62	Strengthen the relationship with suppliers.					
63	Cost competitiveness.					
64	Shorter order cycles.					
65	Customer response flexibility.					
<b>N.</b> 1	N. Indicate degree of benefit when integrating ICT in obtaining market					
info	rmation with	1	2	3	4	5
66	Suppliers					
67	Competitors.					
68	Provide high quality services.					
69	Meet customer needs.					
70	Accuracy of the information with the client.					
71	Information security.					
72	Reliable information (depending on capacity, trust, solvency).					
73	Timely information (relevance, review).					_

5. **Benefits for the company.** Please answer the elements according to the level of perception of the benefit scale mentioned above.

		I	Degre	e of l	enef	it
O. In	dicate the degree of benefit when integrating TIC in the delivery of					
merch	andise	1	2	3	4	5
91	On time.					
92	In quality					
93	In the amount.					
94	In the right product.					
P. Inc	licate the degree of benefit when integrating ICT in the merchandise					
inven	tory in	1	2	3	4	5
95	Stock rotation.					
96	Cycle time (from raw materials to delivery).					
97	Inventory control planning.					
98	The planning of the process of acquisition of materials.					
99	Periodic review of stock.					

					enef	it
Q. Ind	licate the degree of integration of ICT in the performance of the company					
in		1	2	3	4	5
100	Improve customer delivery on time.					
101	Increase the availability of raw materials on the web.					
102	Increased productivity.					
103	Reduce inventory costs.					
104	Performance of our final products.					
105	Speed of deliveries.					
106	Volume or flexible capacity.					
107	Degree of variety of products.					
108	Lower production costs					
109	Greater efficiency in planning.					

6. **ICT tools**. In this section please mark with an X if you know the tool, if your answer is affirmative show the level of professional use within your company. (Assigning a scale of 1-5 where 1 = zero use of the tool and 5 = maximum use of the tool).

	ICT Tool		Do you know it?			Use grade level					
			no	1	2	3	4	5			
1	Internet connection.										
2	Electronic Data Exchange (EDE).										
3	Email.										
4	Social Networks (Facebook, Website, B2B, Auctions, WhatsApp, YouTube)										
5	Internet domain.										
6	Web page.										
7	Electronic sale and purchase.										
8	Extranet (information exchange)										
9	Sourcing (Search for suppliers)										
10	Business Management Software (BMS, Microchip, ERP, MRP, CRP, Oracle, others)										

Thank you for answering this questionnaire!

The recorded information is completely confidential and anonymous, if you have any doubt, do not hesitate to ask the interviewer.