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(54) SYSTEMS AND METHODS TO RECOMMEND PRICE OF BENEFIT ITEMS OFFERED THROUGH A MEMBERSHIP PLATFORM

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claimer.

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(10) Patent No.: US 11,797,903 B2

(45) **Date of Patent:** *Oct. 24, 2023

(52) U.S. Cl.

58) Field of Classification Search

None

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

7,921,028 B2 4/2011 Cole 8,051,040 B2 11/2011 Johnson (Continued)

FOREIGN PATENT DOCUMENTS

JP 2019191623 A 10/2019 WO 2009045899 A2 4/2009

OTHER PUBLICATIONS

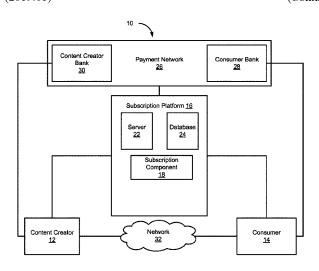
Author(s):Osuala Title: Impact of subscription based crowdfunding on creators online channels Journal: ERF [online]. Publication date: 2019. [retrieved on: Feb. 23, 2023]. Retrieved from the Internet: < URL: https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1017&context=amcis2019> (Year: 2019).

(Continued)

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(57) ABSTRACT

Systems and methods are provided for recommending price of benefit items offered through a membership platform. Exemplary implementations may: obtain benefit information for content creators of a membership platform; obtain consumption information, the consumption information describing acceptance of offers for the benefit items at the requested amounts by the subscribers of the content creators; train a machine learning model on input/output pairs to generate a trained machine learning model, the individual input/output pairs including training input information and training output information; store the trained machine learning model; determine, using the trained machine learning (Continued)



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model, recommended amounts of consideration for the benefit items that correspond to greater acceptance; generate recommendations for individual content creators conveying the recommended amounts for the benefit items offered by the individual content creators; and/or perform other operations.

20 Claims, 5 Drawing Sheets

Related U.S. Application Data

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(56) References Cited

U.S. PATENT DOCUMENTS

0.275.024	Da	2/2012	C14	
8,375,024	B2	2/2013	Goeldi	
8,850,490	B1	9/2014	Thomas	
9,035,163	В1	5/2015	Mohajer	
9,060,249	B2	6/2015	Meredith	
9,558,277	B2	1/2017	Pappas	
9,734,521	B2	8/2017	Curtis	
9,767,208	B1	9/2017	Chow	
9,870,581	В1	1/2018	Vormweg	
10,356,574	BI	7/2019	Wood	
10,607,242	Bi	3/2020	Wood	
10,621,532	BI	4/2020	Conte	
10,936,986	B2	3/2021	Conte	
	B2	3/2021	Wood	
10,937,042				
11,049,191	B1	6/2021	Wilczek	
11,270,330	B1	3/2022	Brini	
2002/0036654	Al	3/2002	Evans	
2002/0103698	$\mathbf{A}1$	8/2002	Cantrell	
2007/0038516	$\mathbf{A}1$	2/2007	Apple	
2007/0069013	A1	3/2007	Seifert	
2007/0164554	$\mathbf{A}1$	7/2007	Krone	
2008/0120185	$\mathbf{A}1$	5/2008	Evans	
2008/0183577	A1	7/2008	Evans	
2008/0215467	$\mathbf{A}1$	9/2008	Huffman	
2008/0265020	A1	10/2008	Copeland	
2009/0069911	Al	3/2009	Stefik	
2009/0158318	Al	6/2009	Levy	
2009/0234710	Al	9/2009	Belgaied Hassine	
2011/0258049	Al	10/2011	Ramer	
2011/0238049	A1*			
2011/02/3/22	711	12/2011	Reisman G06Q 30/0641	
			705/26.1	
2012/0054666	A 1	3/2012	705/26.1 Baird-Smith	
2012/0054666 2012/0179556	A1 A1	3/2012 7/2012	705/26.1 Baird-Smith Ertas	
2012/0054666 2012/0179556 2012/0190386	A1 A1 A1	3/2012 7/2012 7/2012	705/26.1 Baird-Smith Ertas Anderson	
2012/0054666 2012/0179556 2012/0190386 2012/0272278	A1 A1	3/2012 7/2012 7/2012 10/2012	705/26.1 Baird-Smith Ertas Anderson Bedi	
2012/0054666 2012/0179556 2012/0190386	A1 A1 A1	3/2012 7/2012 7/2012	705/26.1 Baird-Smith Ertas Anderson	
2012/0054666 2012/0179556 2012/0190386 2012/0272278	A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012	705/26.1 Baird-Smith Ertas Anderson Bedi	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725	A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012	705/26.1 Baird-Smith Ertas Anderson Bedi Gordon	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462	A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012	705/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328	A1 A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013	705/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226691	A1 A1 A1 A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013	705/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/008032 2013/0197979 2013/0226691 2013/0275429	A1 A1 A1 A1 A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 10/2013	T05/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/019797 2013/0226691 2013/0275429 2014/0025473	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 10/2013 1/2014	T05/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/02778725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2013/0275429 2014/0025473 2014/0032326	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 10/2013 1/2014 1/2014	To5/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226692 2014/0025473 2014/0032326 2014/0067554	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 10/2013 1/2014 1/2014 3/2014	To5/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2014/0025473 2014/0032326 2014/0067554 2014/0067702	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 10/2013 1/2014 1/2014 3/2014 3/2014	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/008032 2013/0197979 2013/0226691 2013/025473 2014/005473 2014/0067702 2014/0067702 2014/0122507	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 10/2014 1/2014 3/2014 3/2014 5/2014	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2013/025473 2014/0065754 2014/0067702 2014/0122507 2014/0122507	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2013 8/2013 8/2013 10/2013 1/2014 1/2014 3/2014 3/2014 5/2014 6/2014	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/01275429 2013/0225691 2013/025473 2014/0067554 2014/0067750 2014/0122507 2014/0164049 2014/0164514	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2013 3/2013 8/2013 10/2013 1/2014 1/2014 3/2014 3/2014 5/2014 6/2014	To5/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/02778725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2013/025473 2014/0025473 2014/0067554 2014/0067554 2014/0164514 2014/0164514 2014/0164514	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 1/2014 1/2014 3/2014 3/2014 5/2014 6/2014 6/2014 7/2014	To5/26.1 Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr.	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2013/0311462 2013/0080328 2013/0197979 2013/0226691 2014/0025473 2014/0067554 2014/0067554 2014/0667504 2014/0164049 2014/0164049 2014/0164049 2014/0164049 2014/0164514 2014/0214641	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 10/2013 1/2014 1/2014 3/2014 5/2014 6/2014 6/2014 6/2014 9/2014	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/008032 2013/0197979 2013/0226691 2013/025473 2014/0065754 2014/0067702 2014/0164049 2014/016451 2014/0214641 2014/0280121 2014/0280121	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 1/2014 1/2014 3/2014 3/2014 5/2014 6/2014 6/2014 7/2014 9/2014	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp Munoz Torres	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2013/025473 2014/0067752 2014/0067702 2014/0122507 2014/0164514 2014/0214641 2014/0214641 2014/02324604 2014/0324604 2014/0324604	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2013 8/2013 8/2013 10/2013 1/2014 1/2014 3/2014 5/2014 6/2014 6/2014 6/2014 10/2014 10/2014	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp Munoz Torres Thomas	
2012/0054666 2012/0179556 2012/0199386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/01275429 2013/0226691 2013/025473 2014/0067754 2014/0067750 2014/0122507 2014/012507 2014/0124641 2014/028012 2014/0324604 2014/0366047 2015/0066189	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2013 3/2013 8/2013 10/2013 1/2014 1/2014 3/2014 3/2014 6/2014 6/2014 6/2014 10/2014 10/2014 12/2014 3/2014	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp Munoz Torres Thomas Mulligan	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2013/0275429 2014/0025754 2014/0067554 2014/0067554 2014/016491 2014/016491 2014/0164514 2014/0280121 2014/03234604 2014/0366647 2015/00666675	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 10/2013 1/2014 1/2014 3/2014 5/2014 6/2014 6/2014 6/2014 1/2014 1/2014 1/2014 1/2014 1/2015 3/2015	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp Munoz Torres Thomas Mulligan Camelio	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2013/0275429 2014/0067754 2014/0067554 2014/0067702 2014/0164049 2014/014/016451 2014/0214641 2014/0214641 2014/0214641 2014/02166047 2015/0066189 2015/0066675 2015/0161692	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 10/2012 11/2012 11/2012 3/2013 8/2013 8/2013 10/2014 1/2014 3/2014 5/2014 6/2014 6/2014 6/2014 1/2014 1/2014 1/2014 1/2014 3/2015 6/2015	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp Munoz Torres Thomas Mulligan Camelio Tembo	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/008032 2013/0197979 2013/0226691 2013/0275429 2014/0067702 2014/0067702 2014/0164049 2014/016451 2014/0214641 2014/0280121 2014/0324604 2014/0366047 2015/0066675 2015/0161692 2015/0161692	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 7/2012 10/2012 11/2012 12/2012 3/2013 8/2013 8/2013 1/2014 1/2014 3/2014 5/2014 6/2014 6/2014 6/2014 7/2014 9/2014 10/2014 12/2014 3/2015 5/2015	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp Munoz Torres Thomas Mulligan Camelio Tembo Garg	
2012/0054666 2012/0179556 2012/0190386 2012/0272278 2012/0278725 2012/0311462 2013/0080328 2013/0197979 2013/0226691 2013/0275429 2014/0067754 2014/0067554 2014/0067702 2014/0164049 2014/014/016451 2014/0214641 2014/0214641 2014/0214641 2014/02166047 2015/0066189 2015/0066675 2015/0161692	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	3/2012 7/2012 10/2012 11/2012 11/2012 3/2013 8/2013 8/2013 10/2014 1/2014 3/2014 5/2014 6/2014 6/2014 6/2014 1/2014 1/2014 1/2014 1/2014 3/2015 6/2015	Baird-Smith Ertas Anderson Bedi Gordon Devecka Royyuru Han Chatow York Cohen Li Heppding Rathod Zeng Yakos Eteminan Acker, Jr. Sharp Munoz Torres Thomas Mulligan Camelio Tembo	

2016/00/1058	Αl	3/2016	Galuten
2016/0080485	A1	3/2016	Hamedi
2016/0124918	A1	5/2016	Ying
2016/0189198	A1	6/2016	Mckenzie
2016/0210650	A1	7/2016	Sewell
2016/0232480	A1	8/2016	Erez
2016/0357376	A1	12/2016	Carrigan
2017/0076348	A1	3/2017	Jennings
2017/0083930	A1	3/2017	Nagaraj
2017/0161794	A1	6/2017	Zhu
2017/0337621	A1	11/2017	Peters
2018/0040019	A1	2/2018	Gavlovski
2018/0075147	A1	3/2018	Bagheri
2018/0121973	A1	5/2018	Dimascio
2018/0144052	A1	5/2018	Sayyadi-Harikandehei
2018/0365709	A1	12/2018	Modani
2019/0026280	A1	1/2019	Aviyam
2019/0026782	A1	1/2019	Mcgrath
2019/0164082	A1	5/2019	Wu
2019/0290965	A1	9/2019	Oren
2019/0361577	A1	11/2019	Burns
2020/0007934	A1	1/2020	Ortiz
2020/0020014	A1*	1/2020	Jin G06N 5/046
2020/0089724	A1	3/2020	Zimovnov
2020/0134696	A1	4/2020	Lardeux
2020/0219025		7/2020	Conte
	A1	7/2020	Wood
2020/0300538	A1	9/2020	Avakian
2020/0311751	A1	10/2020	Shi
2020/0320571	A1	10/2020	Singh
2021/0133651	A1	5/2021	Conte
2021/0133775	A1	5/2021	Wood
2021/0158317	A1	5/2021	Kurylko
2021/0192460	A1	6/2021	Xu
2022/0156781	A1	5/2022	Brini
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2022/0377399		11/2022	Bonner
2023/0153840		5/2023	Wood
2023/0162118	A1	5/2023	Conte

3/2016 Galuten

OTHER PUBLICATIONS

Content and conduit: Relative profitability in the new era of television Todreas, Timothy Michael. ProQuest Dissertations and Theses, ProQuest Dissertations Publishing. (1996) (Year: 1996) 431 pages.

F. Cappa, S. Franco, E. Ferrucci and R. Maiolini, "The Impact of Product and Reward Types in Reward-Based Crowdfunding," Mar. 11, 2021, in IEEE Transactions on Engineering Management, 12 pages, doi: 10.1109/TEM.2021.3058309 (Year: 2021).

Gerri Detweiler, Reward Crowdfunding, Mar. 20, 2020, Nav, 11 pages, https://www.nav.com/business-financing-options reward-crowdfunding/ (Year: 2020).

Harris, William. "26 Inexpensive Customer Delight Ideas Worth Trying to Fuel Business Growth" Sellbrite, Jun. 2016, https://www.sellbrite.com/blog/customer-delight/(Year: 2016) 26 pages.

Hyken, Shep. "Seven Ways to Properly Give a Gift to Your Customers" Shep Hyken's Blog, Jun. 2016, https://hyken.com/internal-customers/seven-ways-properly-give-gift-customers/(Year: 2016) 11 pages.

Investing in Games With Fig Game SHARES, Feb. 28, 2019, fig.co, 12 pages, https://www.fig.co/invest#rewards-based-crowdfunding (Year: 2019).

J. Lahann, M. Scheid and P. Fettke, "Utilizing Machine Learning Techniques to Reveal VAT Compliance Violations in Accounting Data," 2019 IEEE 21st Conference on Business Informatics (CBI), 2019, pp. 1-10, doi: 10.1109/CBI.2019.00008.

Xuefeng and W. Zhao, "Using Crowdfunding in an Innovative Way: A Case Study from a Chinese Crowdfunding Platform," 2018 Portland International Conference on Management of Engineering and Technology (PICMET), 2018, pp. 1-9, doi: 10.23919/PICMET. 2018.8481838. (Year: 2018).

Lopez et al., A Recommender System Based on a Machine Learning Algorithm for B2C Portals; Published in: 2009 IEEE/WIC/ACM

(56) References Cited

OTHER PUBLICATIONS

International Joint Conference on Web Intelligence and Intelligent Agent Technology Date of Conference: Sep. 15-18, 2009 (Year: 2009).

Massimiliano Barbi and Marco Bigelli, Crowdfunding practices in and outside the US, Jun. 2017, 47 pages, ResearchGate DOI: 10.1016/j.ribaf.2017.05.013 (Year: 2017).

Mattison, David, "Reality Check for your Muses: Creativity and Business Innovation Resources", Searcher; Medford vol. 16, Iss. 10, (Nov./Dec. 2008): 16-21, 55-59. (Year: 2008).

Miller, Nicole. "Inside Buffer's Community Delight Headquarters: How and Why We Send Swag and What It All Costs" Buffer, Apr. 27, 2015, 23 pages, https://buffer.com/resources/community-delight/(Year: 2015).

Ondrejka, Cory, "Escaping the gilded cage: User created content and building the metaverse", 49 N.Y.L. Sch. L. Rev. 81 (2004). (Year: 2004) (23 pages).

Shipwire. "Marketing inserts" Shipwire support, Feb. 27, 2015, https://www.shipwire.com/w/support/marketing-inserts/ (Year: 2015) 9 pages.

Vanderhoef, II, Robert John, et al., "An Industry of Indies: The New Cultural Economy of Digital Game Production", University of California, Santa Barbar, Sep. 2016, pp. 1-259. (Year: 2016).

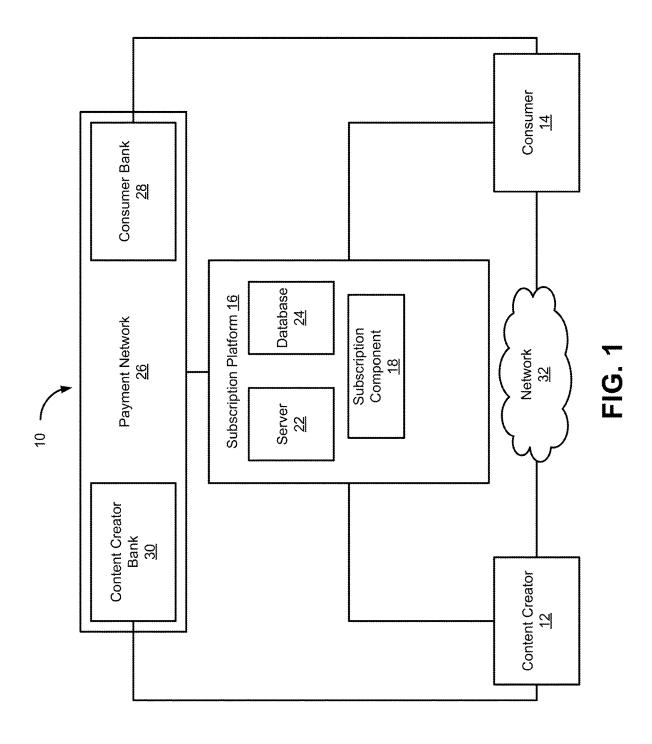
Wilson et al., Real World Applications of Machine Learning Techniques over Large Mobile Subscriber Datasets, SE4ML: Software Engineering for Machine Learning, 9 pages, ARXIV ID: 1502. 02215 Publication Date: Feb. 8, 2015 (Year: 2015).

Yarbro, Printify Vs. Printful: Pros and Cons, Dec. 9, 2019, nomadicwander, https://nomadicwander.com/2019/12/09. printify-vs-printful-pros-and-cons/ (Year:2019) 10 pages.

Iulia, "9 social media apps paying their content creators", May 16, 2021 (Year: 2021).

Perez, "Watchworthy's personalized TV recommendation app will help you find your next binge", Mar. 24, 2020 (Year: 2020).

* cited by examiner



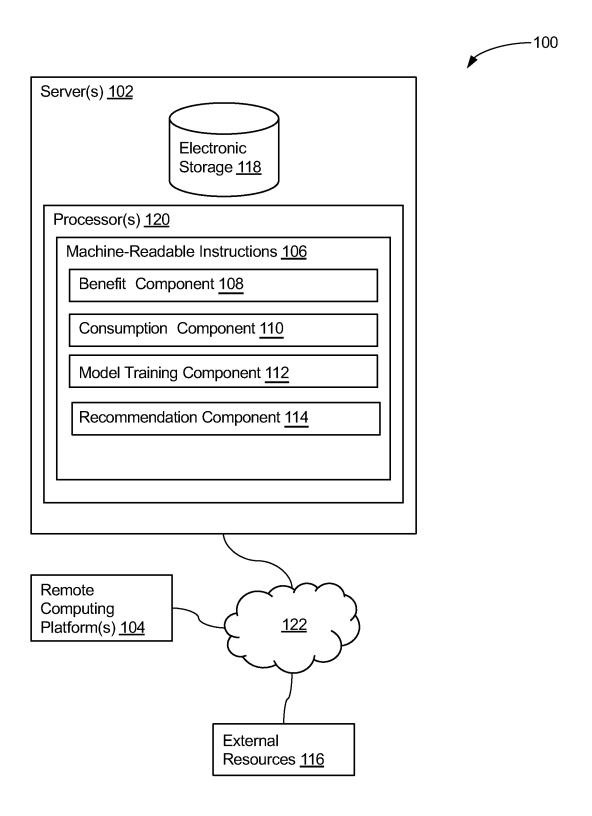


FIG. 2

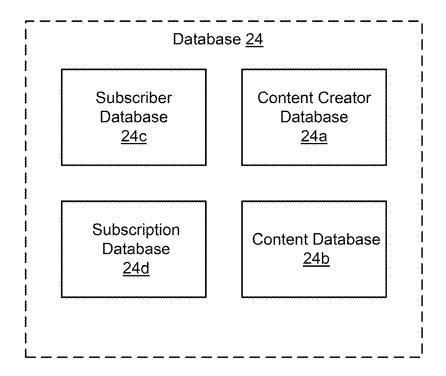


FIG. 3

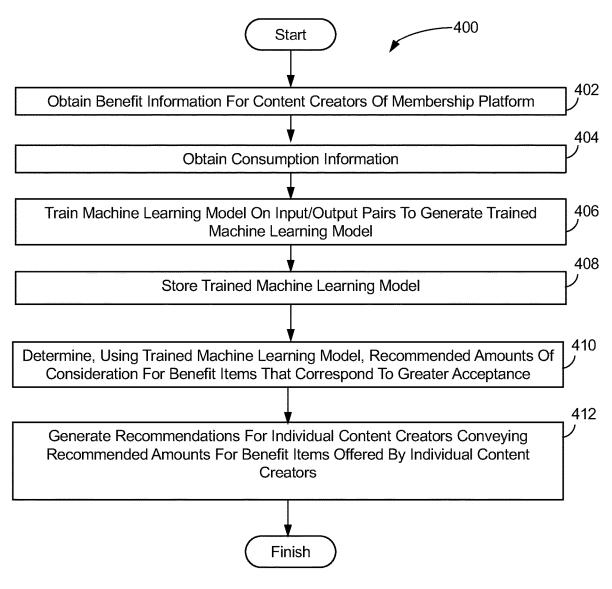


FIG. 4

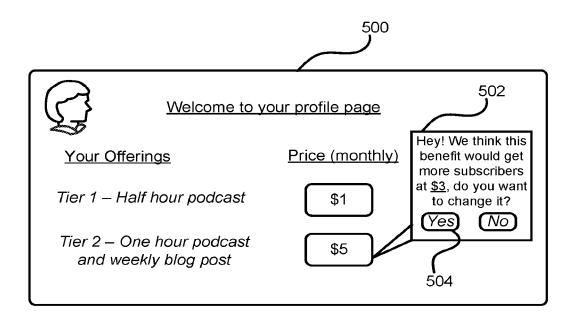


FIG. 5

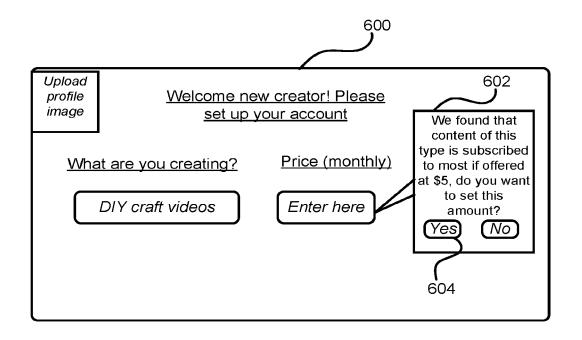


FIG. 6

SYSTEMS AND METHODS TO RECOMMEND PRICE OF BENEFIT ITEMS OFFERED THROUGH A MEMBERSHIP PLATFORM

FIELD

The disclosure relates to systems and methods to recommend price of benefit items offered through a membership platform.

BACKGROUND

Different platforms may be utilized by entities seeking contributions from the general public to obtain a needed ¹⁵ service(s) and/or resource(s). Some of these platforms facilitate raising resources (i.e., funds) from the users through monetary contributions or donations to support a project. Oftentimes, supporters of a project are given rewards or special perks, where the size and/or exclusivity of the ²⁰ rewards or special perks may depend on the amount contributed.

SUMMARY

A membership platform may be comprised of users including one or more of content creators, subscribers, and/or other users. Content creators may be users of the membership platform who offer content (also referred to as "benefit items") to subscribers in exchange for consider- 30 ation. A "benefit item" may refer to a good and/or service. A good may comprise a physical good and/or a digital good. In some implementations, subscribers may donate funds to a content creator such that the benefit item may be the altruism in supporting the content creator. Subscribers may 35 be users of the membership platform who subscribe, through payment of a one-time and/or recurring (e.g., monthly) fee, to one or more content creators. A subscriber of an individual content creator may obtain access to benefit items offered through the membership platform by virtue of being 40 a subscriber to the individual content creator. A subscriber of an individual content creator may obtain preferential access to benefit items offered through the membership platform by virtue of being a subscriber to the individual content creator. Preferential access may refer to subscriber-only access to 45 benefit items and/or other content. Preferential access may refer to tiered levels of access to benefit items and/or other content. Different levels of access may offer different quantities, content types, and/or combinations of benefit items. Different levels may correspond to different amounts of 50 consideration paid by the given subscriber. In some implementations, other users of the membership platform may obtain limited access to benefit items. In some implementations, other users may be non-paying users and/or onetime visitors to the membership platform.

Within a membership platform, content creators may not know how to price their benefit items in order to obtain more paying subscribers. The content creators would greatly benefit from a determination of optimal pricing for the different benefit items and/or types of benefit items. One or more 60 implementations described herein may use machine learning, heuristics, and/or other techniques to determine optimal pricing.

One aspect of the present disclosure relates to a system configured for recommending price of benefit items offered 65 through a membership platform. The system may include one or more hardware processors configured by machine-

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readable instructions. The computer components may include one or more of a benefit component, a consumption component, a model training component, recommendation component, and/or other computer components.

The benefit component may be configured to obtain benefit information for content creators of a membership platform, and/or other information. The benefit information may characterize benefit items offered by the content creators to subscribers of the membership platform in exchange for requested amounts of consideration. By way of non-limiting illustration, the benefit information may characterize a first benefit item offered by a first content creator in exchange for a first requested amount of consideration.

The consumption component may be configured to obtain consumption information and/or other information. The consumption information may describe acceptance of offers for the benefit items at the requested amounts by the subscribers of the content creators. The acceptance of the offers for the benefit items by the subscribers may be described based on one or more of quantity of subscribers who have accepted the offers at the requested amounts, amount of revenue received from the acceptance of the offers at the requested amounts, and/or other measure.

The model training component may be configured to train a machine learning model to generate recommendations for recommended amounts of consideration for the benefit items that correspond to greater acceptance. The machine learning model may be trained on input/output pairs to generate a trained machine learning model. The individual input/output pairs may include training input information, training output information, and/or other information. The training input information may include the benefit information and/or other information. The training output information may include the consumption information and/or other information. The model training component may be configured to store the trained machine learning model.

The recommendation component may be configured to determine, using the trained machine learning model, recommended amounts of consideration for the benefit items that correspond to greater acceptance. By way of non-limiting example, a first recommended amount may be determined for the first benefit item. The first recommended amount may be different from the first requested amount.

The recommendation component may be configured to generate recommendations for individual content creators conveying the recommended amounts for the benefit items offered by the individual content creators. By way of non-limiting example, a first recommendation conveying the first recommended amount may be generated for the first content creator.

In some implementations, the recommendation component may be configured to use the trained machine learning model to determine recommended amounts of consideration for benefit items yet to be offered to subscribers via the membership platform. By way of non-limiting illustration, the recommendation component may be configured to provide the trained machine learning model with benefit information characterizing a second benefit item of a second content creator. The trained machine learning model may be configured to output recommended amounts of consideration for the benefit items that correspond to greater acceptance. By way of non-limiting illustration, the model may output a second recommended amount for the second benefit item.

As used herein, any association (or relation, or reflection, or indication, or correspondence) involving servers, processors, client computing platforms, and/or another entity or

object that interacts with any part of the system and/or plays a part in the operation of the system, may be a one-to-one association, a one-to-many association, a many-to-one association, and/or a many-to-many association or N-to-M association (note that N and M may be different numbers greater than 1).

As used herein, the term "obtain" (and derivatives thereof) may include active and/or passive retrieval, determination, derivation, transfer, upload, download, submission, and/or exchange of information, and/or any combination thereof. As used herein, the term "effectuate" (and derivatives thereof) may include active and/or passive causation of any effect, both local and remote. As used herein, the term "determine" (and derivatives thereof) may include measure, calculate, compute, estimate, approximate, generate, and/or otherwise derive, and/or any combination thereof.

These and other features, and characteristics of the present technology, as well as the methods of operation and functions of the related elements of structure and the combination of parts and economies of manufacture, will become more apparent upon consideration of the following description and the appended claims with reference to the accompanying drawings, all of which form a part of this specification, wherein like reference numerals designate corresponding parts in the various figures. It is to be expressly understood, however, that the drawings are for the purpose of illustration and description only and are not intended as a definition of the limits of the invention. As used in the specification and in the claims, the singular form of "a", "an", and "the" include plural referents unless the context clearly dictates otherwise.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates an example membership system.

FIG. 2 illustrates a system configured to recommend price of benefit items offered through a membership platform, in accordance with one or more implementations.

FIG. 3 illustrates an example database.

FIG. 4 illustrates a method to recommend price of benefit items offered through a membership platform, in accordance with one or more implementations.

FIG. 5 illustrates a user interface, in accordance with one or more implementations.

FIG. 6. illustrates a user interface, in accordance with one or more implementations.

DETAILED DESCRIPTION

Some entities may seek to obtain funds through subscriptions. Such entities may utilize online membership platforms that allow consumers to sign up for ongoing payments in exchange for rewards or other membership benefits. Entities seeking funding may be content creators, for example, 55 artists, musicians, educators, etc. Content creators may create content, which may refer to one or more of information, experience, products, and/or other content provided to an audience or end-user, whether it be digital, analog, virtual, and/or other form. For example, types of content 60 may include but is not limited to video content, podcasts, photographic art, webcomics, do-it-yourself crafts, digital music, performance art, and/or other types of content. Content creators may utilize membership platforms that allow consumers to become subscribers of the content creator. As 65 subscribers, consumers may contribute or donate money to a content creator on a recurring (e.g., weekly or monthly)

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basis and/or per piece of content created by the content creator. Content creators may interact with subscribers and/or prospective subscribers (e.g., consumers that show interest in the content created by content creators) in a variety of ways. Understanding the price of benefit items which lead to greater acceptance by subscribers is important in order to drive the content creators to greater growth.

FIG. 1 illustrates an example subscriber-based membership system 10 (sometimes referred to herein as a "membership platform"). A content creator 12 may register and set up a creator account with subscription platform 16. Content creator 12 may create a page on a website hosted by server 22 of subscription platform 16 and input relevant information. Content creator 12 may input information associated with and/or relevant to content creator 12 via subscription component 18, such as creation information, content information, information specifying desired and/or initial subscription levels, preferred revenue source information (e.g., preferred currency, currency source, and/or other information), identification information (e.g., identification of applicable tax jurisdiction and/or other information), and/or other information. A page created by content creator 12 may be built using such information to make potential consumers aware of how content creator 12 may wish to be supported/ receive support for his/her content creation in addition to subscribership revenue. Content creator 12 may set up a content creator account with subscription platform 16 through subscription component 18 or another appropriate component allowing content creator 12 to register with subscription platform 16. Various types of information regarding content creator 12 may be input into subscription platform 16, some of which may be information identifying content creator 12.

Consumer 14 (also referred to as a "subscriber") may set up a subscriber account with subscription platform 16. In setting up the subscriber account, consumer 14 may input demographic information relevant to consumer 14 (e.g., age, income, job, etc.). Information identifying consumer 14 (e.g., name, a picture, a phone number, etc.) may be input by consumer 14 when setting up the subscriber account. Through the page created by content creator 12, a consumer 14 may pledge to donate a given amount of money to content creator 12 every time content creator 12 creates content. For example, if content creator 12 is an artist, consumer 14 may pledge to donate ten dollars each time content creator 12 creates a piece of art.

In order to remit payment to content creator 12, consumer 14 may set up a payment mechanism through subscription platform 16 as part of setting up his/her subscriber account. When subscription platform 16 is notified or determines that content creator 12 has created content, subscription platform 16 may access payment network 26 to obtain and/or transfer the pledged amount from consumer bank 28 to content creator bank 30. Alternatively (or in addition to per content pledge donations), consumer 14 may pledge to donate a given amount to content creator 12 on a recurring basis through subscription platform 16. For example, consumer 14 may pledge to donate five dollars each month to content creator 12, where each month, subscription platform 16 may access payment network 26 to obtain and transfer the pledged amount from consumer bank 28 to content creator bank 30. It should be understood that consumer 14 may have an established relationship with consumer bank 28, and that content creator 12 may have an established relationship with content creator bank 30. It should be noted that subscription platform 16 may retain a portion, such as some percentage,

of the pledged amount, as a fee for hosting the page created by content creator 12, providing payment services, etc.

As consideration for the pledged donations, content creator 12 may provide some type of preferential access to consumer 14 in the form of, e.g., special perks or rewards.

Content creator 12 may specify tiers of preferential access based upon the amount of money consumer 14 pledges to donate and/or depending on whether the pledged donation is a recurring donation or a per content donation. The amounts and/or types of pledged donations that may be made by consumer 14 to back content creator 12 may be referred to as subscription levels.

For example, in return for a monthly, recurring dollar amount of donation, content creator 12 may provide a 15 high-resolution digital image of the artwork created during that month to consumer 14. In exchange for a weekly, recurring dollar amount of donation, content creator 12 may provide a high-resolution digital image of the artwork created during that month as well as a time-lapse video of 20 content creator 12 creating the artwork. In exchange for another dollar amount per content donation, content creator 12 may provide a low-resolution digital image of the artwork. For another dollar amount per content donation, content creator 12 may engage in a live webchat or live 25 meet-and-greet with consumer 14. Various types of preferential access may be provided by content creator 12 to consumer 14, and content creator 12 may specify the subscription level to preferential access correlation.

The preferential access may be provided to consumer 14 30 from content creator 12. For example, content creator 12 may email digital copies of artwork to consumer 14 over a communications network, such as a local area network (LAN), a wide area network (WAN), a wireless network (e.g., WiFi), a mobile communication network, a satellite 35 network, the Internet, fiber optic, coaxial cable, infrared, radio frequency (RF) or any other suitable network. The preferential access may be provided to consumer 14 from content creator 12 via subscriber platform 16. For example, the live webchat between content creator 12 and consumer 40 14 may be provided through some chat functionality of the page of content creator 12 hosted on server 22 of subscription platform 16, which may reside on communications network 32 or on another network (not shown).

It should be noted that not all subscription levels are 45 necessarily associated with preferential access. Some consumers may be driven to subscribe to content creator 12 on the basis of created content rather than any special perks or rewards.

The specification and management of subscriptions on 50 behalf of content creator 12 may be handled by subscription component 18 alone or in conjunction with database 24. For example, a user interface may be provided via subscription component 18 allowing content creator 12 to specify his/her desired subscription levels and corresponding preferential 55 access, as well as his/her preferred sources of revenue. Subscription component 18 may receive the information input by content creator 12 and transmit the information for storage as one or more records, matrices, or other data structures in database 24 or within memory local to sub- 60 scription component 18. Database 24 or the local memory of subscription component 18 may be configured in a suitable database configuration, such as a relational database, a structured query language (SQL) database, a distributed database, an object database, etc. Suitable configurations 65 and database storage types will be apparent to persons having skill in the relevant art.

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Content creator 12 may add subscribership information, update and/or delete existing subscribership information, add creation information, as well as update and/or delete creation information, add, update, and/or delete preferential access information and/or its correspondence to subscription levels, etc. Such changes may be input via subscription component 18 and reflected in its local memory and/or database 24. It should be understood that content creator 12 and/or consumer 14 may be an individual or some entity representative of an individual or group of individuals.

Apart from providing preferential access to consumer 14, content creator may engage with consumer 14 by interacting in a variety of ways. For example, content creator 12 may communicate with consumer 14 over email, one or more social media platforms, a messaging platform or other appropriate communication mechanism or method. It should be understood that such communication platforms or mechanisms may be embodied in communications network 32 allowing content creator 12 and consumer 14 to communicate outside of subscription platform 16. It should be understood that communication platforms or mechanisms may operate in conjunction with subscription platform 16 such that one or more of their respective functionalities may be utilized through subscription platform 16. For example, social media hyperlinks allowing information from content creator 12's page may be provided on the webpage allowing content creator 12 to share content creation progress updates with consumer 14. For example, content creator 12 may respond to a communication from consumer 14 posted on a comment section provided on content creator 12's page in a private message or as part of the comment thread. It should be noted that content creator 12 may engage a single consumer, e.g., consumer 14, one-on-one and/or may engage a group of consumers. For example, content creator 12 may post a "public" comment on his/her webpage that may be seen by any consumer that is a subscriber to content creator 12 and/or any consumer that may be a potential subscriber.

FIG. 2 illustrates a system 100 configured to recommend price of benefit items offered through a membership platform. In some implementations, system 100 may include one or more of server(s) 102, client computing platform(s) 104, and/or other components. The terms client computing platform, remote computing platform, and/or computing platform may be used interchangeably herein to refer to individual ones of the client computing platform(s) 104. Server(s) 102 may be configured to communicate with one or more client computing platforms 104 according to a client/server architecture and/or other architectures via one or more network(s) 122. In some implementations, one or more network(s) 122 may include the Internet and/or other networks. Client computing platform(s) 104 may be configured to communicate with other client computing platforms via server(s) 102 and/or according to a peer-to-peer architecture, a client-server architecture, and/or other architectures. Users may access system 100 via client computing platform(s) 104.

It is noted the system 100 of FIG. 2 may be the same as, or included as part of, the system 10 shown in FIG. 1. For example, the server(s) 102 may be the same as or included in servers 22. Network(s) 122 may be the same as or included in network 32. Individual client computing platforms of one or more client computing platforms 104 may be computing platforms utilized by content creator 12 and/or consumer 14 to access system 10 and/or system 100. Nontransitory electronic storage 118 may be the same as or included in database 24. Accordingly, those skilled in the art will recognize that although system 10 and system 100 are

shown and described separately, they may comprise a single common system. However, in some implementations, the features and/or functionality of system 100 may be provided remotely as a separate system from system 10.

Server(s) 102 may be configured by machine-readable instructions 106. Machine-readable instructions 106 may include one or more instruction components. The instruction components may include computer program components. The instruction components may include one or more of a benefit component 108, a consumption component 110, a model training component 112, a recommendation component 114, and/or other instruction components.

Benefit component 108 may be configured to obtain benefit information for content creators of a membership platform and/or other information. The benefit information may characterize benefit items offered by the content creators to subscribers of the membership platform in exchange for requested amounts of consideration. The benefit items may be characterized by different benefit types of the benefit 20 items, and/or other characteristics. The benefit types may characterize the benefit items based on one or more of an amount of consideration requested to access the benefit items (e.g., the subscription level needed to obtain access to a given benefit item), a medium of creation, content of the 25 benefit items, and/or other characteristics. Medium of creation may include one or more of physical, digital, and/or other mediums. The content of the benefit items may include one or more of a painting, a song, music, spoken word audio (e.g., a podcast, a shout out, and/or other audio), a video 30 content, photographic art, webcomics, do-it-yourself crafts, performance art, and/or other content. In some implementations, benefit information may be obtained from individual content creator through entry and/or selection of the benefit information by the content creators into a user interface.

By way of non-limiting example, the benefit information may characterize a first benefit item offered by a first content creator in exchange for a first requested amount of consideration. The first benefit item may be characterized by a first benefit type and/or other characteristics.

Consumption component 110 may be configured to obtain consumption information and/or other information. The consumption information may describe acceptance of offers for the benefit items at requested amounts by the subscribers. The acceptance of the offers for the benefit items by the 45 subscribers may be described based on one or more of quantity of subscribers who have accepted the offers at the requested amounts (e.g., including one or more of a total, an average, a frequency, a quantity over a certain time period, etc.), an amount of revenue received from subscribers who 50 have accepted the offers at the requested amounts (e.g., including one or more of a total, an average, a frequency, a quantity over a certain time period, etc.), and/or other information.

Model training component 112 may be configured to train 55 a machine learning model to determine recommended amounts of consideration for the benefit items that correspond to greater acceptance. The model training component 112 may be configured to train the machine learning model based on a training corpus and/or other information to 60 generate a trained machine learning mode. The training corpus may include input/output pairs. The individual input/output pairs may include one or more of training input information, training output information, and/or other information. The training input information may include benefit 65 information and/or other information. The training output information information and/or other information information and/or

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other information. Model training component 112 may be configured to store the trained machine learning model.

The machine learning model may include one or more of a neural network, a convolutional neural network, and/or other machine-learning framework. In some implementations, the machine learning model may be configured to optimize objective functions. In some implementations, optimizing objective functions may include one or both of maximizing a likelihood of the training set or minimizing a classification error on a held-out set.

Recommendation component 114 may be configured to determine, using the trained machine learning model, recommended amounts of consideration for the benefit items that correspond to greater acceptance. The condition of "greater" may be relative to one or more of other benefit items offered by other content creators (e.g., a system-wide basis), other benefit items offered by individual content creators (e.g., a content creator basis), and/or other information. In some implementations, the recommended amounts of consideration for the benefit items may represent the requested amounts of consideration for the benefit items having the largest quantity of subscribers who have accepted the offers for the benefit items at the requested amounts. In some implementations, the recommended amounts of consideration for the benefit items may represent the requested amounts of consideration for the benefit items having returned the highest revenue from the acceptance of the offers at the requested amounts.

In some implementations, the recommended amounts of consideration for the benefit items may be characterized and/or categorized by benefit type. By way of non-limiting example, a first recommended amount may be determined for the first benefit item. By virtue of the first benefit item being the first benefit type, the first recommended amount may be determined for benefit items of the first benefit type.

Recommendation component 114 may be configured to generate recommendations for individual content creators conveying the recommended amounts for the benefit items offered by the individual content creators. By way of non-limiting example, a first recommendation conveying the first recommended amount may be generated for the first content creator.

In some implementations, the recommendation component 114 may be configured to provide the trained machine learning model with benefit information characterizing one or more benefit items of one or more content creators not included in the training corpus. By way of non-limiting illustration, the trained machine learning model may be used during registration of user accounts of the content creators with the membership platform in order to initially set prices. The trained machine learning model may be configured to output recommendations for recommended amounts of consideration. By way of non-limiting illustration, the recommendation component 114 may be configured to provide the trained machine learning model benefit information characterizing a second benefit item offered by a second content creator. The benefit information characterizing the second benefit item offered by a second content creator may be information not included in the training corpus. The trained machine learning model may output a second recommendation for a second recommended amount of consideration for the second benefit item.

In some implementations, recommendation component 114 may be configured to generate recommendations for individual content creators conveying the recommended amounts for the benefit items of a certain benefit type. The benefit types may characterize the benefit items based on

one or more of an amount of consideration requested to access the benefit items (e.g., the subscription level needed to obtain access to a given benefit item), a medium of creation, content of the benefit items, and/or other characteristics. By way of non-limiting illustration, a third benefit 5 item and/or other benefit items may be of the first benefit type. Based on the first benefit item being the first benefit type, the first recommended amount may be determined for the benefit items of the first benefit type. A third recommendation may be generated conveying the first recommended amount for the third benefit item by virtue of the third benefit also being of the first benefit type.

In some implementations, recommendation component 114 may be configured to effectuate presentation of the recommendations on a user interface displayed on comput- 15 ing platform(s) 104 associated with the content creators. The user interface may be configured to obtain user entry and/or selection by the content creators to accept the recommendations. In some implementations, the user interface may be part of the membership platform. In some implementations, 20 the user interface may be provided through one or more communication channels external to the membership platform, e.g., email, SMS, etc. Acceptance of the recommendations may cause the requested amounts of consideration for the benefit items to be automatically changed to the 25 recommended amounts of consideration for the benefit items. An instance of a user interface may include one or more user interface elements configured to facilitate user interaction with the user interface. By way of non-limiting illustration, user interface elements may include one or more 30 of text input fields, drop down menus, check boxes, display windows, virtual buttons, and/or other elements configured to facilitate user interaction.

In some implementations, recommendation component 114 may be configured to effectuate presentation of one or 35 more recommendations for recommended amounts of consideration for benefit items on a user interface displayed on the computing platform(s) 104 associated with content creators during registration of user accounts within the membership platform. The user interface may be configured to 40 obtain one or more of user entry and/or selection by the content creators of benefit information, user entry and/or selection to accept recommendations, and/or other input. Acceptance of the recommendations may cause amounts of consideration for the benefit items to be automatically set 45 tion outside of system 100, external entities participating within the membership platform to the recommended amounts of consideration.

By way of non-limiting illustration, recommendation component 114 may be configured to effectuate presentation of the second recommendation on a user interface displayed 50 on a computing platform associated with the second content creator during a registration of a user account of the second content creator with the membership platform. The user interface may be configured to obtain user entry and/or selection by the second content creator to accept the second 55 recommendation. Acceptance of the second recommendation may cause an amount of consideration for the second benefit item to be automatically set within the membership platform to the second recommended amount of consideration.

FIG. 5 illustrates a user interface 500, in accordance with one or more implementations. The user interface 500 may display a recommendation 502 conveying a recommended amount of consideration for a benefit item offered by a content creator. The user interface 500 may be configured to 65 obtain user entry and/or selection by the content creator to accept the recommendation 502. By way of non-limiting

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illustration, a user interface element 504 may be provided. An acceptance of the recommendation 502 may cause a requested amount of consideration for the benefit item to be automatically changed to the recommended amount of consideration.

FIG. 6. illustrates a user interface 600, in accordance with one or more implementations. The user interface 600 may display a recommendation 602 conveying a recommended amount of consideration for a benefit item to be offered by a content creator. The user interface 600 may be displayed during a registration of a user account of the content creator with the membership platform. The user interface 600 may be configured to obtain user entry and/or selection by the content creator to accept the recommendation 602. By way of non-limiting illustration, a user interface element 604 may be provided. An acceptance of the recommendation 602 may cause an amount of consideration for the benefit item to be automatically set to the recommended amount of consideration

In some implementations, server(s) 102, client computing platform(s) 104, and/or external resources 116 may be operatively linked via one or more electronic communication links. For example, such electronic communication links may be established, at least in part, via a network such as the Internet and/or other networks. It will be appreciated that this is not intended to be limiting, and that the scope of this disclosure includes implementations in which server(s) 102, client computing platform(s) 104, and/or external resources 116 may be operatively linked via some other communication media.

A given client computing platform 104 may include one or more processors configured to execute one or more computer program components. The computer program components may be configured to enable an expert or user associated with the given client computing platform 104 to interface with system 100, system 10, and/or external resources 116, and/or provide other functionality attributed herein to client computing platform(s) 104. By way of non-limiting example, the given client computing platform 104 may include one or more of a desktop computer, a laptop computer, a handheld computer, a tablet computing platform, a NetBook, a Smartphone, a gaming console, and/or other computing platforms.

External resources 116 may include sources of informawith system 100, and/or other resources. In some implementations, some or all of the functionality attributed herein to external resources 116 may be provided by resources included in system 100.

Server(s) 102 may include electronic storage 118, one or more processors 120, and/or other components. Server(s) 102 may include communication lines, or ports to enable the exchange of information with a network and/or other computing platforms. Illustration of server(s) 102 in FIG. 2 is not intended to be limiting. Server(s) 102 may include a plurality of hardware, software, and/or firmware components operating together to provide the functionality attributed herein to server(s) 102. For example, server(s) 102 may be implemented by a cloud of computing platforms operating together as server(s) 102.

Electronic storage 118 may comprise non-transitory storage media that electronically stores information. The electronic storage media of electronic storage 118 may include one or both of system storage that is provided integrally (i.e., substantially non-removable) with server(s) 102 and/or removable storage that is removably communicable with server(s) 102 via, for example, a port (e.g., a USB port, a

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firewire port, etc.) or a drive (e.g., a disk drive, etc.). Electronic storage 118 may include one or more of optically readable storage media (e.g., optical disks, etc.), magnetically readable storage media (e.g., magnetic tape, magnetic hard drive, floppy drive, etc.), electrical charge-based storage media (e.g., EEPROM, RAM, etc.), solid-state storage media (e.g., flash drive, etc.), and/or other electronically readable storage media. Electronic storage 118 may include one or more virtual storage resources (e.g., cloud storage, a virtual private network, and/or other virtual storage 10 resources). Electronic storage 118 may store software algorithms, information determined by processor(s) 120, information received from client computing platform(s) 104, and/or other information that enables server(s) 102 to function as described 15 herein

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Processor(s) 120 may be configured to provide information processing capabilities in server(s) 102. As such, processor(s) 120 may include one or more of a digital processor, an analog processor, a digital circuit designed to process 20 information, an analog circuit designed to process information, a state machine, and/or other mechanisms for electronically processing information. Although processor(s) 120 is shown in FIG. 2 as a single entity, this is for illustrative purposes only. In some implementations, processor(s) 120 25 may include a plurality of processing units. These processing units may be physically located within the same device, or processor(s) 120 may represent processing functionality of a plurality of devices operating in coordination. Processor(s) 120 may be configured to execute components 30 108, 110, 112 and/or 114, and/or other components. Processor(s) 120 may be configured to execute components 108, 110, 112 and/or 114, and/or other components by software; hardware; firmware; some combination of software, hardware, and/or firmware; and/or other mechanisms for con- 35 figuring processing capabilities on processor(s) 120. As used herein, the term "component" may refer to any component or set of components that perform the functionality attributed to the component. This may include one or more physical processors during execution of processor readable 40 instructions, the processor readable instructions, circuitry, hardware, storage media, or any other components.

It should be appreciated that although components 108, 110, 112 and/or 114 are illustrated in FIG. 2 as being implemented within a single processing unit, in implemen- 45 tations in which processor(s) 120 includes multiple processing units, one or more of components 108, 110, 112 and/or 114 may be implemented remotely from the other components. The description of the functionality provided by the different components 108, 110, 112 and/or 114 described 50 below is for illustrative purposes, and is not intended to be limiting, as any of components 108, 110, 112 and/or 114 may provide more or less functionality than is described. For example, one or more of components 108, 110, 112 and/or 114 may be eliminated, and some or all of its functionality 55 may be provided by other ones of components 108, 110, 112 and/or 114. As another example, processor(s) 120 may be configured to execute one or more additional components that may perform some or all of the functionality attributed below to one of components 108, 110, 112 and/or 114.

FIG. 3 illustrates elements that may make up database 24. As indicated previously, subscription component 18 of FIG. 1 may transmit information input by content creator 12 and/or consumer 14 regarding creation and/or subscribership information to database 24. Subscription platform 16, 65 via server 22, for example, may monitor and obtain creation and/or subscribership information for storage in database 24.

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For example, subscription platform 16 may monitor and store additional content created and/or subscriber demographic information as well as performance-related subscribership information, e.g., engagement activity between content creator 12 and his/her subscribers, one of whom may be consumer 14. For example, subscription platform 16 may monitor the amount of money being generated and/or lost through the subscribers (e.g., outcome information), as well as content creator 12's subscriber retention rate. For example, subscription platform 16 may monitor and store performance-related creation information, such as the amount of content that content creator 12 is creating, how often and/or how quickly content creator 12 reacts to subscriber engagement activity, etc.

Database 24 may include one or more databases or partitions in which information relating to content creator 12, and/or subscribership relevant to content creator 12. For example, database 24 may include a content creator database 24a, a content database 24b, a subscriber database 24c, and a subscription database 24d. It should be noted that the elements and/or functionality of database 24 may be implemented in local memory resident in subscription component 18 or shared between database 24 and the local memory of subscription component 18 rather than solely in database 24.

Database 24 may be populated with one or more of benefit information, consumption information, recommendations, creation data and/or subscription level information monitored or obtained from and/or associated with existing content creator and/or subscriber accounts established in subscription platform 16, and/or other information. Creation data may refer to information that characterizes one or more of content creator 12, the content that content creator 12 creates, and activity engaged in by content creator 12 to interact with one or more subscribers and/or to which consumer 14 is granted preferential access.

Content creator information characterizing content creator 12 may be information reflecting the type of creator that content creator 12 designates him/herself to be and/or other self-identified preferences regarding subscription offerings by content creator 12. For example, content creator type information may reflect that content creator 12 may be a paint artist, a digital artist, a sculptor, a video game developer, a writer, a performance artist, etc. Content creator preference information may reflect subscription levels content creator 12 wishes to offer to subscribers. Content creator preference information may reflect, e.g., a desired minimum revenue, preferred sources of revenue, subscription level proportions, etc. For example, content creator preference information may include information indicating content creator 12's desire for more subscribers pledging some amount of money or less subscribers pledging a greater amount of money. For example, content creator preference information may include information specifying that content creator 12 wishes to supplement his/her subscription-generated revenue with revenue generated from the sale of promotional merchandise. Such information may be stored in a content creator database 24a.

In addition to content creation-related information, and upon registering with subscription platform 16 as a content creator, content creator 12 may input information characterizing the identity of content creator 12. For example, content creator 12 may input or upload contact information, a telephone number associated with a personal user device, such as a smartphone, an email address, a photograph, and/or other identifying information. Such identifying information may be used by subscription platform 16 in a variety of ways to associate content creator 12 with particular

content, his/her webpage, payment of subscription donations, and/or other information.

Content information characterizing the content that content creator 12 creates may refer to one or more of the type of content created, the medium in which the content is 5 created and/or presented (based on self-identified preference, commonality, and/or other measure), the amount of content created, and/or the frequency at which the content is created. For example, type of content information and/or content medium information may indicate that content creator 12 prefers to create paintings on canvas, develops video games for a mobile platform, performs in online musical performances, and/or other information. For example, content amount information may reflect that content creator 12 created a series of artwork comprising four paintings. For 15 example, content frequency information may indicate that content creator 12 developed three video games over the course of six months. Such information may be stored in content database 24b.

Consumer 14 may subscribe to content creator 12 by 20 registering with subscription platform 16. During registration, consumer 14 may input certain subscriber demographic information indicative of economic and/or social characteristics of consumer 14. Subscriber demographic information may reflect the yearly income of consumer 14, a geographic 25 area in which consumer 14 resides, the age of consumer 14, interests of consumer 14, etc. Subscriber information may include data regarding the amount of money consumer 14 is currently pledged to donate to one or more content creators. Over time, as monitored and collected by subscription 30 platform 16, subscriber information may include information regarding the amount of money consumer 14 has previously donated to one or more content creators, including content creator 12. Subscriber information, as monitored and obtained by subscription platform 16 may include an 35 Internet Protocol (IP) address indicative of a current location of consumer 14 and/or an IP address indicating a payment source. Such information may be stored in subscriber database 24c.

Like content creator 12, consumer 14 may input or upload 40 other identifying information that may be used by subscription platform 16 in a variety of ways to associate consumer 14 with particular content, a particular content creator, payment of subscription donations, etc. For example, a photograph or phone number of consumer 14 may be used, 45 e.g., as a mechanism for correlating consumer 14's attendance at a live event with consumer 14's status as a subscriber of content creator 12, another content creator present at the live event, a subscriber of content similar to that being presented at the live event, etc. Such information may be 50 stored in subscriber database 24c. Subscription component 18 or another component may be used to provide a user interface that may be used by consumer 14 to input such information.

Subscription level information may refer to information 55 characterizing different subscription levels and corresponding preferential access information specified by content creator 12. For example, subscription level information may reflect that a ten dollar recurring donation is rewarded with a high-resolution digital image of artwork created during 60 that month to consumer 14. Such subscriber level information may be stored in subscription database 24d.

It should be noted that other databases or partitions may make up database 24. For example, database 24 may include one or more databases or partitions for storing information 65 including, but not limited to the following: preferential access information characterizing activity in which content

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creator 12 engagements may refer to data reflecting the type of activity, the level and/or exclusivity of preferential access to that activity granted to consumer 14; subscriber and/or content creator engagement information characterizing interactions, the type and/or frequency of interactions between subscribers and content creators, and/or the medium over which interactions may occur; and historical subscription level and/or engagement information reflecting subscription level and/or engagement information monitored and gathered over one or more periods of time.

It should be noted that some of the information described above may not necessarily be required. It should be noted that information reflecting additional aspects of, e.g., the content, content creator, content creator preferences, and/or subscribership, is contemplated by the disclosure. For example, preferential access need not necessarily be offered for each subscription level. For example, subscriber data may include data reflecting particular content creators to which a subscriber pledges donations.

FIG. 4 illustrates a method 400 to recommend price of benefit items offered through a membership platform, in accordance with one or more implementations. The operations of method 400 presented below are intended to be illustrative. In some implementations, method 400 may be accomplished with one or more additional operations not described, and/or without one or more of the operations discussed. Additionally, the order in which the operations of method 400 are illustrated in FIG. 4 and described below is not intended to be limiting.

In some implementations, method 400 may be implemented in one or more processing devices (e.g., a digital processor, an analog processor, a digital circuit designed to process information, an analog circuit designed to process information, a state machine, and/or other mechanisms for electronically processing information). The one or more processing devices may include one or more devices executing some or all of the operations of method 400 in response to instructions stored electronically on an electronic storage medium. The one or more processing devices may include one or more devices configured through hardware, firmware, and/or software to be specifically designed for execution of one or more of the operations of method 400.

An operation 402 may include obtaining benefit information for content creators of a membership platform. The benefit information characterizing benefit items offered by the content creators to subscribers of the membership platform in exchange for requested amounts of consideration. Operation 402 may be performed by one or more hardware processors configured by machine-readable instructions including a component that is the same as or similar to benefit component 108, in accordance with one or more implementations.

An operation 404 may include obtaining consumption information. The consumption information may describe acceptance of offers for the benefit items at the requested amounts by the subscribers of the content creators. Operation 404 may be performed by one or more hardware processors configured by machine-readable instructions including a component that is the same as or similar to consumption component 110, in accordance with one or more implementations.

An operation 406 may include training a machine learning model on input/output pairs to generate a trained machine learning model. The individual input/output pairs including training input information and training output information. Operation 406 may be performed by one or more hardware processors configured by machine-readable instructions

including a component that is the same as or similar to model training component 112, in accordance with one or more implementations.

An operation **408** may include storing the trained machine learning model. Operation **408** may be performed by one or 5 more hardware processors configured by machine-readable instructions including a component that is the same as or similar to model training component **112**, in accordance with one or more implementations.

An operation 410 may include determining, using the 10 trained machine learning model, recommended amounts of consideration for the benefit items that correspond to greater acceptance. Operation 410 may be performed by one or more hardware processors configured by machine-readable instructions including a component that is the same as or 15 similar to recommendation component 114, in accordance with one or more implementations.

An operation **412** may include generating recommendations for individual content creators conveying the recommended amounts for the benefit items offered by the individual content creators. Operation **412** may be performed by one or more hardware processors configured by machine-readable instructions including a component that is the same as or similar to recommendation component **114**, in accordance with one or more implementations.

Although the system(s) and/or method(s) of this disclosure have been described in detail for the purpose of illustration based on what is currently considered to be the most practical and preferred implementations, it is to be understood that such detail is solely for that purpose and that 30 the disclosure is not limited to the disclosed implementations, but, on the contrary, is intended to cover modifications and equivalent arrangements that are within the spirit and scope of the appended claims. For example, it is to be understood that the present disclosure contemplates that, to 35 the extent possible, one or more features of any implementation can be combined with one or more features of any other implementation.

What is claimed is:

1. A system configured to recommend price of subscription levels offered by content creators through an online membership platform, the system comprising:

one or more physical processors configured by machinereadable instructions to:

train a machine learning model to generate a trained machine learning model, the machine learning model being trained based on subscribership information for content creators of an online membership platform, the content creators offering one or more levels 50 of ongoing subscribership to consumers in exchange for requested amounts of recurring consideration, the subscribership information characterizing benefit items received by subscribers of the content creators in accordance with the one or more levels of ongoing 55 subscribership, the subscribership information further describing acceptance of offers for the one or more levels of ongoing subscribership at the requested amounts of recurring consideration by sets of the subscribers subscribing to the content creators, 60 the trained machine learning model being configured to output a recommended amount of recurring consideration for a first level of ongoing subscribership offered by a content creator that corresponds to greater acceptance by the subscribers in the sets of 65 the subscribers, the recommended amount of recurring consideration being different from an amount

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initially offered by the content creator for the first level of ongoing subscribership;

store the trained machine learning model; and

responsive to acceptance of a recommendation by the content creator via input into a user interface:

update the subscribership information to reflect the recommended amount of recurring consideration being a current amount requested in exchange for the first level of ongoing subscribership to the content creator; and

provide the trained machine learning model the subscribership information as updated to refine the trained machine learning model.

2. The system of claim 1, wherein the one or more physical processors are further configured by the machine-readable instructions to:

generate the recommendation based on the output of the trained machine learning model; and

effectuate presentation of the recommendation on the user interface displayed on a computing platform associated with the content creator, the user interface being configured to receive the input to accept the recommendation.

- 3. The system of claim 2, wherein the acceptance of the recommendation causes a recommended amount of recurring consideration to be automatically set as the current amount requested in exchange for the first level of ongoing subscribership to the content creator.
- **4**. The system of claim **1**, wherein the acceptance of the offers for the one or more levels of ongoing subscribership by the subscribers is described based on quantity of subscribers who have accepted the offers at the requested amounts of recurring consideration.
- 5. The system of claim 4, wherein the recommended amount of recurring consideration is an amount associated with having a largest quantity of subscribers who have accepted the offers.
- **6**. The system of claim **1**, wherein the benefit items are characterized by benefit type of the benefit items.
 - 7. The system of claim 6, wherein the recommended amount of recurring consideration is for the benefit items of a certain benefit type.
 - **8**. The system of claim **7**, wherein the certain benefit type corresponds to a medium of creation of the benefit items.
 - **9**. A system configured to recommend price of subscription levels offered by content creators through an online membership platform, the system comprising:

one or more physical processors configured by machinereadable instructions to:

provide a trained machine learning model with benefit information for a content creator of an online membership platform, the content creator offering one or more levels of ongoing subscribership to consumers, the benefit information characterizing benefit items received by subscribers of the content creator in accordance with the one or more levels of ongoing subscribership, the trained machine learning model having been trained based on acceptance of offers by sets of subscribers subscribing to content creators at the one or more levels of ongoing subscribership for one or more requested amounts of recurring consideration;

generate, using output of the trained machine learning model, a recommendation conveying a recommended amount of recurring consideration for a first level of ongoing subscribership to the content creator

that corresponds to greater acceptance by the subscribers in the sets of subscribers;

responsive to acceptance of the recommendation by the content creator via input into a user interface:

automatically set an offered amount of recurring 5 consideration for the first level of ongoing subscribership to the recommended amount of recurring consideration; and

provide the trained machine learning model with information indicating that the offered amount of 10 recurring consideration for the first level of ongoing subscribership has been automatically set to the recommended amount of recurring consideration to refine the trained machine learning model.

10. The system of claim 9, wherein the one or more 15 physical processors are further configured by the machine-readable instructions to:

effectuate presentation of the recommendation on the user interface displayed on a computing platform associated with the content creator during a registration of a user 20 account of the content creator with the online membership platform; and

wherein the user interface is configured to obtain first input by the content creator to accept the recommendation

11. A method to recommend price of subscription levels offered by content creators through an online membership platform, the method comprising:

training a machine learning model to generate a trained machine learning model, the machine learning model 30 being trained based on subscribership information for content creators of an online membership platform, the content creators offering one or more levels of ongoing subscribership to consumers in exchange for requested amounts of recurring consideration, the subscribership 35 information characterizing benefit items received by subscribers of the content creators in accordance with the one or more levels of ongoing subscribership, the subscribership information further describing acceptance of offers for the one or more levels of ongoing 40 subscribership at the requested amounts of recurring consideration by sets of the subscribers subscribing to the content creators, the trained machine learning model being configured to output a recommended amount of recurring consideration for a first level of 45 ongoing subscribership offered by a content creator that corresponds to greater acceptance by the subscribers in the sets of the subscribers, the recommended amount of recurring consideration being different from an amount initially offered by the content creator for the first level 50 of ongoing subscribership;

storing the trained machine learning model; and responsive to acceptance of a recommendation by the content creator via input into a user interface:

updating the subscribership information to reflect the 55 recommended amount of recurring consideration being a current amount requested in exchange for the first level of ongoing subscribership to the content creator; and

providing the trained machine learning model the subscribership information as updated to refine the trained machine learning model.

12. The method of claim 11, further comprising:

generating the recommendation based on the output of the trained machine learning model; and

effectuating presentation of the recommendation on the user interface displayed on a computing platform asso18

ciated with the content creator, the user interface being configured to receive the input to accept the recommendation.

- 13. The method of claim 12, wherein the acceptance of the recommendation causes the recommended amount of recurring consideration to be automatically set as the current amount requested in exchange for the first level of ongoing subscribership to the content creator.
- 14. The method of claim 11, wherein the acceptance of the offers for the one or more levels of ongoing subscribership by the subscribers is described based on quantity of subscribers who have accepted the offers at the requested amounts of recurring consideration.
- 15. The method of claim 14, wherein the recommended amount of recurring consideration is an amount associated with having a largest quantity of subscribers who have accepted the offers.
- **16.** The method of claim **11**, wherein the benefit items are characterized by benefit type of the benefit items.
- 17. The method of claim 16, wherein the recommended amount of recurring consideration is for the benefit items of a certain benefit type.
- 18. The method of claim 17, wherein the certain benefit
 type corresponds to a medium of creation of the benefit items.
 - 19. A method to recommend price of subscription levels offered by content creators through an online membership platform, the method comprising:

providing a trained machine learning model with benefit information for a content creator of an online membership platform, the content creator offering one or more levels of ongoing subscribership to consumers, the benefit information characterizing benefit items received by subscribers of the content creator in accordance with the one or more levels of ongoing subscribership, the trained machine learning model having been trained based on acceptance of offers by sets of subscribers subscribing to content creators at the one or more levels of ongoing subscribership for one or more requested amounts of recurring consideration;

generating, using output of the trained machine learning model, a recommendation conveying a recommended amount of recurring consideration for a first level of ongoing subscribership to the content creator that corresponds to greater acceptance by the subscribers in the sets of subscribers; and

responsive to acceptance of the recommendation by the content creator via input into a user interface:

automatically setting an offered amount of recurring consideration for the first level of ongoing subscribership to the recommended amount of recurring consideration; and

providing the trained machine learning model with information indicating that the offered amount of recurring consideration for the first level of ongoing subscribership has been automatically set to the recommended amount of recurring consideration to refine the trained machine learning model.

20. The method of claim 19, further comprising:

effectuating presentation of the recommendation on the user interface displayed on a computing platform associated with the content creator during a registration of a user account of the content creator with the online membership platform; and

wherein the user interface is configured to obtain first input by the content creator to accept the recommendation.

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